MEMOIRS OF THE REV. DR. JOHN WALLIS.

With a fine Portrait of that eminent Mathematician.

JOHN WALLIS was the ſon of a clergyman, and born at Aſhford, in Kent, November 23, 1616. His father dying when he was but ſix years of age, he was educated in grammar learning, at Leygreen, near Tenterden, by Mr. James Movat, a Scotſman; and, in 1630, was removed to Felſted ſchool, in Eſſex, where, beſide the Greek and Latin, he was inſtructed in the Hebrew tongue, and alſo in the rudiments of logic, muſic, and the French language. In 1632, he was ſent to Emanuel college, in Cambridge, where he had, among others Mr. Whichcote for his tutor; and took the degrees in arts, a bachelor's in 1637, a maſter's in 1640. About the ſame time he went into orders, and was choſen fellow of Queen's college, there being no vacancy in his own. He kept his fellowſhip till it was vacated by his marriage, but quitted the college to be chaplain to ſir Richard Darley, whoſe ſeat was at Buſtercamb in Yorkſhire. After he had lived in this family about a year, he removed to that of the lady Vere, with whom he continued two years more. It was there that he diſcovered the art of decyphering; and after the Reſtoration he was abuſed, for having during the civil war decyphered the letters of king Charles, taken in his cabinet at Naſeby: which report being revived upon the acceſſion of James II, to the crown, he wrote a letter in his own vindication to his friend Dr. Fell, biſhop of Oxford, dated April 8, 1685.

In 1643, he publiſhed, 'Truth Tryed, or Animadverſions on the lord Brooke's treatiſe, called, The Nature of Truth, &c.' ſtyling himſelf 'a miniſter in London,' probably of St. Gabriel Fenchurch, the ſequeſtration of which had been granted to him. In 1644, he was choſen one of the ſcribes or ſecretaries to the aſſembly of divines at Weſtminſter; and the ſame year took a wife. Academical ſtudies being much interrupted by the civil wars in both the univerſities, the eminently learned among them reſorted to London, and formed aſſemblies there. Wallis belonged to one of theſe, the members whereof met once a week, to diſcourſe on philoſophical matters; and this ſociety was the riſe and the beginning of that, which was afterward incorporated by the name of the Royal Society. The Savilian profeſſor of geometry at Oxford being ejected by the parliamentary viſitors in 1649, Wallis was appointed to ſucceed him in that place; and accordingly removed from London to Oxford, and, having entered himſelf of Exeter college, was admitted maſter of arts there the ſame year. He opened his lectures on the laſt day of October, with an inaugural ſpeech in Latin, which was afterward printed. In 1650, he publiſhed ſome 'Animadverſions on a book of Mr. Baxter, intitled, Aphoriſms of Juſtification and the Covenant;' and in 1653, a grammar of the Engliſh tongue, for the uſe of foreigners in Latin, under this title: 'Grammatica Linguæ Anglicanæ, cum tractatu de Loquelâ ſeu ſonorum formatione,' in 8vo. In the piece 'de Loquelâ,' &c. he tells us, that 'he has philoſophically conſidered the formation of all ſounds uſed in articulate ſpeech, as well of our own, as of any other language that he knew; by what organs, and in what poſition, each ſound was formed; with the nice diſtinctions of each, which in ſome letters of the ſame organ are very ſubtile: ſo that by ſuch organs, in ſuch poſition, the breath iſſuing from the lungs will form ſuch ſounds, whether the perſon do or do not hear himſelf ſpeak.' Purſuing theſe reflections, he was led to think it poſſible, that a deaf perſon might be taught to ſpeak by being directed ſo to ap-

ply the organs of ſpeech, as the ſound of each letter required, which children learn by imitation and frequent attempts, rather than by art. He made a trial or two with ſucceſs; and particularly upon a young gentleman of diſtinction, which involved him in a controverſy with Dr. Holder. This gentleman's name was Alexander Popham, ſon of colonel Edward Popham, who was ſome time an admiral in the ſervice of the long parliament. The firſt cure was performed by Holder in his houſe at Blechingdon, in 1659; but Popham loſing what he had been taught, after he was called home to his friends, was ſent to Dr. Wallis, who brought him to his ſpeech again. Holder publiſhed a book, intitled, 'The Elements of Speech; an Eſſay of Inquiry into the natural Production of Letters: with an Appendix concerning Perſons that are deaf and dumb, 1669,' 8vo. In the appendix he relates, how ſoon, and by what methods, he brought Popham to ſpeak. In 1678, he publiſhed, in 4to, 'A Supplement to the Philoſophical Tranſactions of July 1670, with ſome Reflections on Dr. Wallis' Letter there inſerted.' This was written to claim the glory of having taught Popham to ſpeak, which Wallis in the ſaid letter had claimed to himſelf: upon which the doctor ſoon after publiſhed, 'A Defence of the Royal Society and the Philoſophical Tranſactions, particularly thoſe of July 1670, in anſwer to the Cavils of Dr. William Holder, 1678,' 4to. We ſhall only add, that while ſome have determined it favour of Wallis, others have determined it againſt him; among which latter ſort is Mr. Wood, at the ſame time remarking Wallis to be a perſon, 'who at any time can make black white, and white black, for his own ends; and hath a ready knack of ſophiſtical evaſion, as he himſelf did know full well.' The 'Grammar' was reprinted in 1765, 8vo.

May 1654, he took the degree of doctor in divinity. In 1655, Mr. Hobbes having printed his treatiſe 'de Corpore Philoſophico,' Dr. Wallis, the ſame year wrote a confutation of it in Latin, under the title of, 'Elenchus Geometriæ Hobbianæ,' in 8vo; which ſo provoked Hobbes, that in 1656, he publiſhed it in Engliſh, with the addition of what he called, 'Six Leſſons to the Profeſſors of Mathematics in Oxford,' 4to. Upon this, Dr. Wallis wrote an anſwer in Engliſh, intitled, 'Due Correction for Mr. Hobbes; or School-Diſcipline for not ſaying his Leſſons right, 1656,' in 8vo: to which Mr. Hobbes replied in a pamphlet, with the title of 'ΣΤΙΓΜΑΙ, &c. or, Marks of the abſurd Geometry, Rural Language, Scottiſh Church Politics, and Barbariſms, of John Wallis, &c. 1657,' 4to. This was immediately rejoined to by Dr. Wallis, in 'Hobbiani Puncti Diſpunctio, 1657; and here this controverſy ſeems to have ended at this time: but four years after, 1661, Mr. Hobbes printed 'Examinatio et Emendatio Mathematicorum Hodiernorum in ſex Dialogis;' which occaſioned Dr. Wallis to publiſh, the next year, 'Hobbius Heautontimorumenos,' in 8vo, addreſſed to Mr. Boyle. In 1657, he collected and publiſhed his mathematical works in two parts, with the title of 'Matheſis Univerſalis,' in 4to; and, in 1658, 'Commercium Epiſtolicum de quæſtionibus quibuſdam Mathematicis nuper habitum,' in 4to. This was a collection of letters, written by lord Brouncker, ſir Kenelm Digby, Fermat, Schooten, Wallis, and others. He was this year, upon the death of Dr. Gerard Langbaine, choſen cuſtos archivorum of the univerſity, yet not without ſome ſtruggle. Dr. Zouch, a learned civilian, who, as his friend Mr. Henry Stubbe repreſents the caſe, had been an aſſeſſor in the vice-chancellor's court thirty years and more, was a candidate, but without ſucceſs: which induced Mr. Stubbe, who, on his friend Mr. Hobbes' account, had before waged war againſt Wallis, to publiſh a pamphlet, intitled, 'The Savilian Profeſſor's Caſe Stated, 1658,' 4to.

Dr. Wallis replied to this; and Mr. Stubbe republiſhed his caſe, with enlargements, and a vindication againſt the exceptions of Dr. Wallis.

Upon the Reſtoration, he met with great reſpect; the king thinking favourably of him on account of ſome ſervices done, as the king knew, to his royal father and himſelf; and the lord chancellor Clarendon, and ſir Edward Nicholas, ſecretary of ſtate, being his friends. He was therefore not only made king's chaplain, but confirmed alſo in his places of Savilian profeſſor and keeper of the archives. In 1661, he was appointed one of the divines, who were empowered to review the book of Common Prayer; and afterward complied with the terms of the act of uniformity, continuing a ſteady conformiſt to the church of England till his death. He was one of the firſt members of the Royal Society, and kept a conſtant correſpondence with it by letters and papers; many of which are publiſhed in the 'Tranſactions' of that ſociety. He continued to publiſh many and uſeful works, in the mathematical way eſpecially. In 1676, he gave an edition of 'Archimedis Syracuſani Arenarius et Dimenſio Circuli:' and, in 1682, he publiſhed from the manuſcripts, 'Claudii Ptolemæi Opus Harmonicum,' in Greek, with a Latin verſion and notes; to which he afterward added, 'Appendix de veterum Harmonica ad hodiernam comparata, &c.' In 1685, he publiſhed ſome theological pieces; and about 1690, was engaged in a diſpute with the Unitarians; and, in 1692, in another diſpute about the ſabbath. His pamphlets and books upon ſubjects of divinity are very numerous, but nothing near ſo important as his mathematical performances: however, in 1697, the curators of the preſs at Oxford, thought it for the honour of the univerſity, to collect all his works which had been printed ſeparately, as well in Engliſh as in Latin, and to publiſh them together in the Latin tongue. They were accordingly publiſhed at Oxford, 1699, in three volumes, folio; and dedicated to king William.

He died, October 28, 1703, in his eighty-eighth year; and was buried in St. Mary's church at Oxford, where a monument is erected to his memory. He left behind him one ſon, who had been born in 1650, and two daughters. We are told, that he was of a vigorous conſtitution, and of a mind which was ſtrong, calm, ſerene, and not eaſily ruffled or diſcompoſed; that though, while he lived, he was looked upon by the high flyers with a jealous eye, and ſuſpected as if not thoroughly affected to the monarchy and church eſtabliſhment, he was yet very much honoured and eſteemed by others of a better temper ad judgment, and of more knowledge and larger thoughts; and that by theſe, both at home and abroad, he was reckoned the glory and ornament of his country, and of the univerſity in particular. He ſpeaks of himſelf, in his letter to Mr. Smith, in a ſtrain which ſhows him to have been a very wiſe and prudent man, whatever his ſecret opinions and attachments might be: 'It has been my lot,' ſays he, 'to live in a time, wherein have been many and great changes and alterations. It has been my endeavour all along to act by moderate principles, between the extremities on either hand, in a moderate compliance with the powers in being, in thoſe places where it has been my lot to live, without the fierce and violent animoſities uſual in ſuch caſes againſt all that did not act juſt as I did, knowing that there were many worthy perſons engaged on either ſide; and willing, whatſoever ſide was uppermoſt, to promote, as I was able, any good deſign for the true intereſt of religion, of learning, and the public good, and ready ſo to do good offices, as there was opportunity; and, if things could not be juſt as I could wiſh, to make the beſt of what is; and hereby, through God's gracious providence, I have been able to live eaſy and uſeful, though not great.'

A poſthumous volume of 'Thirteen Sermons,' (with an ample account of his life) was publiſhed, in 1791, by his great grandſon, Mr. William Wallis; who poſſeſſes many valuable MSS. and had till lately a rich gold medal, which had been preſented to Dr. Wallis, by the elector of Brandenburgh, with an honourable inſcription, and a chain of gold of ſo great value as to produce from a refiner (after having firſt been offered for ſale to the Aſhmolean Muſeum, at Oxford, the Britiſh Muſeum, and to ſeveral antiquaries) the ſum of ſixty-two pounds five ſhillings.

ACCOUNT *of a ſingular* METHOD *of* HUNTING WILD SWINE *in the Iſland of* Sumatra. *By Mr.* JOHN, *Miſſionary of* Tranquebar.

IN the kingdom of Siak, in the iſland of Sumatra, which lies oppoſite to Malaca, there are two kinds of wild ſwine: one kind live in the foreſts on roots and fruit; their fleſh is exceedingly well taſted, but they are not numerous. The other kind frequent the impenetrable buſhes and marſhes on the ſea coaſt, where they live on crabs and roots. They are not ſo large as the European ſwine, are of a grayer colour, and keep in large herds. The latter, at certain periods of the year, in herds of ſometimes a thouſand, ſwim from the one ſide of the river Siak to the other, at its mouth, which is three or four miles in breadth, and return to the former at ſtated periods. This paſſage takes place alſo in the ſmall iſlands, by their ſwimming from the one to the other. On ſuch occaſions, theſe ſwine are hunted by a tribe of the Malays, who are not Mahometans but heathens, and who are held in great contempt by the other Malays, who will neither ſuffer them to inhabit among them nor to approach them. On this account they were obliged formerly to live more at ſea than on land, in ſmall boats covered with mats, until the king of Siak lately permitted them to eſtabliſh themſelves in the uninhabited diſtricts on the ſea coaſt. They are called in the Malay language the *Salettians*, and by the Dutch the *Lard Malays*. They are better made and of a brighter colour than the other Malays; have only one wife each, whereas it is well known that the other Malays admit of polygamy.

The women are ſaid to be remarkably well made, and to retain their charms much longer than thoſe among the other Malays and inhabitants of the ſea coaſt; ſo that at the age of forty they look as well as the latter at twenty. They go half naked, and wear only a piece of cloth wrapped round their loins, which hangs down to their knee. They are much addicted to ſtrong liquor, particularly arrac; and when they ſee an European veſſel, their firſt inquiry is after that beverage, for which and tobacco they give every thing they have, and ſometimes even their daughters and neareſt connections, to be kept for a certain time as ſervants, but not ſlaves. They are much more attached to the Dutch than to any other nation, and have the greateſt intercourſe with them. They are much afraid of other nations, and particularly the Malay pirates, becauſe the latter carry them away and ſell them as ſlaves.

On ſuch occaſions they defend themſelves with great bravery by means of ſlings, with which they hit a mark very accurately at a great diſtance. They can uſe alſo, with great dexterity, a ſort of javelins made of very hard wood, with which they can ſtrike fiſh at a conſiderable diſtance at the ſurface of the ſea. When theſe javelins are to be uſed againſt robbers, they harden the points of them in the fire, and dip them in lemon juice, by which means the wounds they inflict prove highly dangerous, and often mortal.

Some of the Salettians inhabit alſo ſeveral ſmall iſlands, not frequented by the other Malays, which lie in the ſtraits of Sinkapoor; but theſe are not ſo civilized as thoſe who live near Siak, and often while out fiſhing, or

hunting ſwine, carry off many Portugueſe and other fiſhermen, whom they ſell as ſlaves.

They hunt the ſwine at ſea at different periods, when theſe animals, through natural inſtinct, emigrate as abovementioned. The Salettians, on theſe occaſions, ſmell the ſwine long before they ſee them, and make ready their boats. They then ſend out their dogs, which are trained to this kind of hunting, along the ſtrand, where, by their barking, they prevent the ſwine from getting on ſhore to conceal themſelves in the buſhes. During the paſſage, the boars go firſt, and are followed by the female ſwine and the young ones, all in regular rows, each reſting its ſnout on the rump of the one before it. Theſe animals, ſwimming in long rows cloſe to each other, form a very ſingular ſpectacle.

The Salettians, men and women, meet theſe ſwine in their ſmall flat boats. The former row, and throw large mats, made of the long leaves of the *pandanus odoratiſſima* interwoven through each other, before the leader of each row of ſwine, which ſtill continues to ſwim with great ſtrength; but, ſoon puſhing his feet into the mat, gets ſo entangled that he can no longer move them, or moves them only in a very ſlow manner. The reſt of the row, however, are neither alarmed nor diſconcerted, but keep cloſe to each other; and none of them leave the row, or the poſition in which they are placed. The Salettians then endeavour to row toward them in a lateral direction; and the buſineſs of piercing the ſwine is conſigned chiefly to the women, each of whom is armed with a long large javelin, in the form of a ſpontoon, headed with iron, and with which they ſtab as many of the ſwine as they can reach, always drawing back the weapon. Beſide this inſtrument, they have alſo a number of ſmaller javelins, about ſix feet in length, without iron points, which they carry in their arms, and which they throw to the diſtance of thirty or forty paces, in ſuch a manner as to kill thoſe which they cannot reach with the long javelin. As it is impoſſible for them to throw mats before all the rows, or to kill all the ſwine in ſo ſhort a time, the reſt of theſe animals ſwim off in good order, and in regular rows, toward the place where they are taught by inſtinct that they ſhall find better nouriſhment, and for this time eſcape the danger till they return to their uſual place of reſidence. As the ſwine which have been pierced float every where around, they are picked up and put into larger boats, which follow for that purpoſe.

If theſe hunters fall in with any veſſels belonging to the Chineſe, of whom a great many are ſettled at Malacca, and who on ſuch occaſions become ready purchaſers of their booty, they ſell to them their ſwine, and receive for thoſe that have an inch and a half thickneſs of lard on the breaſt at the rate of a piaſter a-piece. It may readily be believed that none of them are purchaſed by the Malays; for, being Mahometans, they abhor ſwine's fleſh, and, conſequently, theſe pagan ſwine-hunters; to whom they do all the miſchief they can, by deſtroying their huts, robbing them of their property, and often aſſaſſinating them, without ever being called to an account by any one for their depredations.

Of the ſwine which they cannot ſell, they firſt cut off the head; they then ſkin them and cut them up, chiefly for the ſake of the lard, but ſave as much of the fleſh as may be neceſſary to feed their dogs, and throw the reſt into the ſea. They then row their boats, laden with lard, to a ſolitary place on the coaſt unfrequented by the Mahometan Malays, where they melt the lard, and preſerve the greaſe in large earthen veſſels, or *bojans*, which are manufactured in Siam. This greaſe they ſell to the Maki Chineſe; and it is uſed not only by the common people inſtead of butter, as long as it is not rancid, which is ſeldom the caſe in Malacca, but alſo for burning in their lamps inſtead of cocoa-nut oil.

On preſerving FRESH WATER SWEET *during long* VOYAGES: *By* Samuel Bentham, *Eſq.* *

THE Society for the Encouragement of Arts, &c. having thought proper to offer a premium in order to aſcertain, for the uſe of the public, the beſt mode of preſerving freſh water ſweet at ſea, I requeſt you to lay before the ſociety an account of the method which I have employed for this purpoſe on board two ſhips, and which has been attended with all the ſucceſs that can be reaſonably expected.

The mode in which I conceived freſh water might be preſerved ſweet, was merely by keeping it in veſſels of which the interior lining at leaſt ſhould be of ſuch a ſubſtance as ſhould not be acted upon by the water, ſo as to become a cauſe of contamination. Accordingly, on board the two ſhips here alluded to, the greater part of the water was kept, not in caſks, but in caſes or tanks, which, though they were made of wood, on account of ſtrength, were lined with metallic plates, of the kind manufactured by Mr. Charles Wyatt, of Bridge-ſtreet, under the denomination of tinned copper-ſheets; and the junctures of the plates or ſheets were ſoldered together, ſo that the tightneſs of the caſes depended entirely on the lining, the water having no where acceſs to the wood. The ſhape of theſe caſes was adapted to that of the hold of the ſhip, ſome of them being made to fit cloſe under the platform, by which means the quantity of water ſtowed was conſiderably greater than could have been ſtowed, in the ſame ſpace, by means of caſks; and thereby the ſtowage room on board ſhip was very much increaſed.

The quantity of water kept in this manner on board each ſhip was about forty tons, divided into ſixteen tanks; and there was likewiſe on board each of the ſhips about thirty tons ſtowed in caſks as uſual.

As the ſtowing the water in tanks was conſidered as an experiment, the water in the caſks was uſed in preference; that in the tanks being reſerved for occaſions of neceſſity, excepting that a ſmall quantity of it was uſed occaſionally for the purpoſe of aſcertaining its purity, or when the water in the caſks was deemed, when compared with that in the tanks, too bad for uſe.

The water in thirteen of the tanks on board one ſhip, and in all the tanks on board the other, was always as ſweet as when firſt taken from the ſource; but in the other three of the tanks, on board one ſhip, the water was found to be more or leſs tainted as in the caſks. This difference, however, is eaſily accounted for, by ſuppoſing that the water of theſe tanks was contaminated before it was put into them; for in fact the whole of the water was brought on board in caſks for the purpoſe of filling the tanks, and no particular care was taken to taſte the water at the time of taking it on board.

After the water, kept in this manner, had remained on board a length of time which was deemed ſufficient for experiment, it was uſed out, and the tanks were repleniſhed as occaſion required: but in ſome of the tanks, on board one ſhip at leaſt, the original water had remained three years and a half, as appears by the certificates herewith incloſed. About twenty-five gallons of the water, which had remained this length of time in the ſhip, are ſent to the ſociety, in two veſſels made of the ſame ſort of tinned copper with which the tanks were lined. I am, ſir,

Your obedient ſervant,

SAMUEL BENTHAM.

A certificate from captain William Bolton, commander of the ſaid veſ-

* From the Tranſactions of the Society of Arts, &c. Adelphi, London, for 1801. The Society awarded their gold medal to Mr. Bentham for this communication.

ſel, dated Sheerneſs, 28th of June 1800, accompanied this letter, ſtating, that the water delivered to the ſociety was taken from a tank holding about ſeven hundred gallons, and which his predeceſſor, captain Portlock, had informed him had been poured into this tank in December 1796, except about thirty gallons added in 1798, and had remained good during the whole time.

The ſignatures to the above accounts were certified on the 28th of June 1800, by the Rev. C. Thee, miniſter of Sheerneſs.

In a letter dated January 27, general Bentham alſo ſtates, that the water which had been preſerved ſweet on board his majeſty's ſloops Arrow and Dart, and of which he had ſent ſpecimens to the ſociety, was taken from the well at the king's brewhouſe, at Weevil, from whence ſhips of war lying at or near Portſmouth are uſually ſupplied with water for their ſea ſtore, as well as for preſent uſe.

CURIOUS ACCOUNT OF THE HAMSTER.

THE Hamſter (an animal ſcarcely known in this country) belongs to the mus genus, but bears the neareſt reſemblance to that of the myoxus, or marmot. It agrees, however, with both in the conſtruction of its habitation, its way of life, and its general properties. In Gmelin's New Syſtem of Nature, the hamſters make the third general diviſion, called *cricetî:* and the animal, which is the ſubject of this paper, is ſtyled the Mus Cricetus Germanicus, or German Hamſter. The males are about ten inches long, and the tail about three: but the females are ſcarcely more than one half of this ſize. The former weigh from twelve to ſixteen ounces each. Uſually the head and back are of a reddiſh brown colour, the cheeks red, the ſides paler, with three white ſpots; the breaſt, upper part of the fore-legs, and belly, are black. But the colour varies much: ſometimes they are found entirely white, or yellow; and there is a ſpecies which is almoſt entirely black. But what is moſt worthy of obſervation in this animal are, its feet, its teeth, and its cheek-pouches.

The hamſter uſes his feet to run, dig, and climb with. They are ſhort and ſtrong, having four toes and a claw, inſtead of a fifth toe, on the fore-feet; and five toes on each hind-foot. Its teeth are ſixteen in number; it has two inciſors in each jaw; and three grinders on each ſide. The grinders ſerve only to chew with; but the fore-teeth, or inciſors, ſerve not only to ſhell the corn, but alſo as weapons for its defence; and to dig up the earth, where it it too hard for its claws alone.

The cheek-pouches are two ſkinny bags, proceeding from the jaw, above the neck and ſhoulders, and afterward ſloping a little toward the ſpine. They lie encloſed between the muſcles and the outward ſkin. On the outſide, theſe pouches are membranous, ſmooth, and ſhining: and in the inſide, there are a great many glands which ſecrete a fluid, which ſerves to keep the parts flexible, and to reſiſt any accidents which might be occaſioned by the roughneſs of particular ſeeds. The hamſter uſes theſe pouches to collect and carry home the corn: and they are ſo large as to contain an ounce and a half of corn at once: which, on his return to his den, the animal empties, by ſtroking and ſqueezing them with his fore-feet, beginning behind, and preſſing forward toward the mouth. When a hamſter is met with his cheek pouches full of corn, he may be eaſily taken with the hand, without the riſk of being bitten; for while his pouches are full, he has not the free uſe of his jaws: but if he be allowed a little time, he ſoon empties his pouches, as related above, and raiſing himſelf on his hind-legs, ſtands boldly on his defence, or darts on his enemy.

This animal lives always in the corn-fields. Here it forms itſelf a ſubterraneous burrow, divided into ſeveral apartments; with two holes leading from the ſurface: one is perpendicular, at which it goes in, and comes out: and the other, where it lodges its excrement, is oblique, that the wet may the more readily run off. One part of this ſubterraneous dwelling, divided into ſeveral apartments, is the ſtore-houſe where it lays up its winter proviſions of corn, beans, peas, vetches, linſeed, &c. but each ſpecies of grain is kept by itſelf, in a ſeparate cell. The chambers, where themſelves and young lodge, are lined with ſtraw or graſs. The old ones dig their chambers ſeveral feet deep; but thoſe of the young ſcarcely ever exceed one foot in depth. In theſe holes the animal dwells alone, for it has a rooted enmity againſt all other creatures, and even againſt thoſe of its own ſpecies, the females not excepted. When two hamſters encounter, one of them certainly falls; and the weaker is devoured by the conqueror.

The hamſter lies by day in his den, ſtill and quiet; and in the duſk of the evening he comes out, and runs about till midnight: he then retires again into his hole, and continues quiet till about an hour before day-break; then he comes out once more, and runs about till ſun riſing.

The hamſter's manner of living is conſiderably diverſified: like various other animals, he becomes torpid in winter, and continues in that ſtate the greater part of the cold ſeaſon. The male awakes about the middle of February, and the female in March. They do not leave their holes immediately on their recovery from this torpid ſtate, but continue quiet till they have conſumed the remains of their proviſions, which amounts often to one-third of the whole: then, the former opening his hole in March, the latter in April, they come out, return to their former manner of life, and go about ſeeking herbs.

It cannot be denied, that the hamſter is a very deſtructive creature. Some years they are ſo numerous as to occaſion a dearth by their immenſe conſumption of corn. In one year 11,000 ſkins, in a ſecond 54,000, and in a third 80,000, were brought to the town-houſe of Gotha, to receive a reward for their deſtruction. The hamſter lives a conſiderable time, and multiplies prodigiouſly. The female brings forth twice or thrice in the year, and her litter is never fewer than ſix; but oftener from ſixteen to eighteen. The growth of the young is very rapid: at fifteen days old they begin to dig the earth; and in about three weeks they are capable of ſubſiſting independently of the dam.

The hamſter is preyed on by ſeveral animals, but the ferret ſeems ordained to be its moſt inveterate enemy. It is not ſo ſtrong as the hamſter, but it is much more active and cunning; and by theſe means it prevails over him. In ſummer and autumn, he is the ferret's food. He purſues him, even into his den, and kills him there; and having thus gained the victory, he makes it his own habitation. From this he goes out a hamſter-hunting, and having found, he ſeizes him ſo ſtrongly, that he drags him away and preys upon him.

RECEIPT FOR THE CURE OF THE CANCER.

By G. C. Jenner, *of* Burbage, Wilts.

TAKE one part of red lead, in fine powder, and two parts of hog's lard; mix them well together, and with the ſalve thus prepared, ſpread on lint, dreſs the cancerous ſore twice a day.

Mr. Jenner ſays he is the more ſolicitous for the publication of this receipt, having lately been a witneſs to its happy influence in curing a moſt inveterate cancer in the lip of a perſon now living in his neighbourhood, and to whom a perſonal reference can be given, if required. He has alſo heard of ſeveral other inſtances of its wonderful efficacy from the moſt reſpectable authority.

THE POWER OF ATTENTION IN IMPROVING THE PERCEPTIONS.

[From Miſs Hamilton's Letters on Education.]

TO impreſs a conviction of the neceſſity of cultivating the faculty of Attention, nothing more is neceſſary, than to demonſtrate its being eſſential to the operation of every other faculty.

The ſenſes are the organs of information to the mind; and upon their evidence the learned and the vulgar rely with equal confidence. Yet the clearneſs, and, in many inſtances, the truth of their evidence, depends upon the degree of attention that has been exerted. Where the exertion of attention has been habitually neglected, the ſenſes loſe their vigour, and the perceptions become languid and confuſed; but where, on the contrary, the perceptions have been exerciſed by attention, they acquire new ſtrength, and are brought to a degree of perfection, which, in ſome inſtances, appears quite extraordinary.

The truth of what is here advanced will appear beyond all diſpute, when when we conſider, that people, who, from their peculiar avocations, as hunters, ſailors, &c. are habitually intent upon diſtant objects, become capable of diſtinctly diſcerning objects at ſuch an immenſe diſtance, as totally removes them from the ſight of ſuch as have never been accuſtomed to make ſimilar obſervations; while, on the other hand, thoſe who have from early life been accuſtomed to examine minute objects near the eye, frequently become purblind. This defect evidently increaſes with the increaſe of luxury, which draws people together into cities, where children are brought up in ignorance of all the ſublime objects of nature, and have their ſenſe of ſight perpetually occupied in a narrow ſphere.

I am aware of the objection that may be here ſtarted, on account of the formation of the eye; from which, it appears, that ſhort-ſightedneſs muſt be the inevitable conſequence of a certain degree of convexity. But why is this convexity confined to people in certain ſituations? Why does it only appear in thoſe whoſe purſuits and avocations demand minute attention? To a natural defect in the organs of viſion, the child of the peaſant is as liable as the child of the prince; but ſeldom ſhall we meet with a ſhort-ſighted perſon, who has been from infancy accuſtomed to the obſervation of diſtant objects in the country.—Does not this evince the wonder-working power of attention?

Thoſe who enjoy the bleſſings of ſight and hearing, receive through the medium of theſe ſenſes ſo much information, that they pay little attention to the ſenſe of feeling. But when a perſon is deprived of ſight, this ſenſe becomes ſo neceſſary toward the acquirement of ideas, that the attention is then turned toward it ſo effectually, as to make it appear to the vulgar like the acquirement of a new ſenſe. The ſkin of my hand is as fine, the nerves are as exquiſitely ſuſceptible, as any blind perſon's whatever; yet on feeling the ſheet of paper on which I write, with the utmoſt attention of which I am *now* capable, I cannot perceive any difference between the part that is written, and the remainder of the page; yet this, I know, would have been inſtantly diſtinguiſhed by a blind lady with whom I was formerly acquainted. So exquiſite had the ſenſe of feeling in this lady become, that I have ſeen her thread a fine cambric needle with the utmoſt eaſe, the aperture of which could ſcarcely be diſcerned by my eye; and ſo acute was her perception of quantity, that in running her hand along the front wall of a new apartment, ſhe inſtantly diſcovered an error in placing the windows, which had totally eſcaped every other perſon. From this, and ſimiler circumſtances, I am perſuaded,

that by attention the ſenſe of touch might be made much more uſeful to us than it generally is.

The ſenſe of taſte is originally equal in the peaſant and the voluptuary. In the peaſant it remains through life ſimple and uncultivated; but in the votaries of luxury, it is, perhaps, the only perception that is brought to any degree of perfection. Of all our ſenſes, this of taſte furniſhes the mind with the feweſt ideas of reflection; the cultivation of it is therefore leaſt eſſential to the improvement of our intellectual faculties. Is it not, then, lamentable, to find the attention in early and in later life, ſo excluſively directed to the cultivation of this ſenſe? The perſon who cannot diſtinguiſh the difference of colours, muſt neceſſarily have indiſtinct conceptions of particular ſpecies of beauty. He who cannot extend his obſervation to diſtant objects, muſt have his ſtock of ideas proportionally limited; but though a man ſhould not be able to diſtinguiſh between the different taſtes of parſnip and of turtle, the number of his ideas of reflection will ſuffer little diminution. The ſame attention that is beſtowed in acquiring this delicacy of perception with regard to the palate, would, in an equal degree, increaſe the perceptions from all the other organs of ſenſation. And the only reaſon why the habit of attention is more eaſily acquired in the one inſtance than in the others, is, that attention is in the one caſe ſtimulated by appetite, while, in the other, it has no ſuch ſtimulus.

This naturally leads us to conſider the operation of the paſſions upon the faculty of attention. This operation I conceive to be mutual; the paſſions rouſe attention, and attention increaſes paſſion by a ſort of re-action.

By attention the exiſtence of every paſſion is prolonged in an unnatural degree. Wherever the attention is neceſſarily divided between the object of paſſion and other objects, its force ſoon diminiſhes. No perſon, who is under the neceſſity of earning a ſubſiſtence, is in any danger of dying either of grief or love.

Where ſelfiſhneſs predominates, we ſhall find the attention perpetually alive to every minute circumſtance, that can in any wiſe affect the eaſe, health, or comfort, of the perſon concerned; while that which affects the eaſe, health, or comfort of others, is totally overlooked. Where the attention is thus excluſively turned to ſelf, it never fails to create a ſuſceptibility of feeling, which deceives the mind into an opinion of its own exquiſite ſenſibility. But what is the ſenſibility, that is not under the influence of benevolence? Let thoſe who pique themſelves upon the poſſeſſion of this amiable quality, try it by the teſt I have given. Let them obſerve, if their attention is as much alive to whatever can affect the feelings of others, as to whatever even remotely concerns themſelves. Let them eſtimate their feelings by the manner in which they *feel* for the trouble and uneaſineſs they create to thoſe around them. If attention be turned to leſſen this trouble, and to alleviate this uneaſineſs, with as much ardour as it is engaged in leſſening and alleviating what comes home to ſelf, it will produce that legitimate ſenſibility, which is born of benevolence. But where ſelf is the great, the only object of attention, ſenſibility and ſelfiſhneſs may be conſidered as ſynonimous.

By the attention which a delicate ſtate of health demands, a diſpoſition to ſelfiſhneſs is frequently produced. Another proof in favour of my argument, as it ſhows the power which attention has over the affections of the heart. When directed toward others by pity, love, gratitude, or any of the ſympathetic emotions, it increaſes the diſpoſition to benevolence. When excluſively devoted to the ſtudy of ſelfiſh gratification, it augments the ſpirit of ſelfiſhneſs. Hence the neceſſity of teaching children to pay attention to others.

I have, in the former volume, given ſome inſtances of the operation of

ſelfiſhneſs in thoſe who are the ſlaves of terror. Let us now obſerve the power of this paſſion in quickening the faculty of attention.

The ſtrongeſt facts brought forward by the advocates of *natural* antipathy all go to prove, that perſons under the influence of ſuch antipathies have a ſort of inſtinctive knowledge of the preſence of the objects of their averſion. As for inſtance; a perſon who has a natural antipathy to a cat, will immediately diſcover when one is in the room even though it ſhould be effectually hid from his ſight. The ſame ſpecies of ſagacity I once ſaw in a lady, who had an antipathy to dead birds. Soon after entering the parlour of a friend's houſe, where ſhe went on a morning-viſit, ſhe grew ſick, and inſtantly declared that there muſt be a dead bird in the room. The bird-cage was immediately examined, and poor Dicky found dead at the bottom of the cage! I at that time became a convert to the doctrine of antipathies, and ſhould probably have remained ſo ever after, had I not been led to reflect on the power of attention in the ſeeming improvement of the faculties. On conſidering this ſubject, it appeared to me, that if the ſenſe of feeling can, by the power of habitual attention, convey thoſe nice perceptions of the ſurfaces of body, which, to people who have not thus exerciſed their attention, appear aſtoniſhing and incomprehenſible; why might not attention (ſtimulated, as it muſt be in theſe inſtances, by the impulſe of averſion) produce a like lively perception of ſmell? That a perſon who has had his attention frequently thus directed, may be able to perceive a certain effluvia which eſcapes the obſervation of others, is not more extraordinary, than that a blind perſon ſhould be able to diſtinguiſh colours by the touch.

I am too well aware of the taſte for the wonderful that prevails on vulgar minds, to expect any of that deſcription to enter into this mode of reaſoning. To minds of a higher order, therefore, do I now addreſs myſelf; and ſincerely hope I ſhall one day have the pleaſure of ſeeing the ſubject entered upon and purſued by thoſe who are equal to the inveſtigation. To men of ſcience who are intimately acquainted with the human frame, the ſubject muſt be particularly intereſting. It is they only who can determine, how far this power of attention may explain the apparent effects produced by charms, and all the long *et-cetera* of fooleries, which have in every age abuſed the credulity of mankind. Should it appear that the wonderful cures effected by animal magnetiſm, tractors, and ſuch like inefficient cauſes, may really be explained by the phenomena of attention, it will tend to raiſe the importance of our preſence ſubject. And I confeſs, I am the more ſanguine on this point, upon conſidering that the efficacy of all theſe wonder-working charms ſeems entirely to depend on the *attention* of the public; and that, like the hyſteric fits of fine ladies, they ceaſe to operate the moment they ceaſe to be obſerved.

Attention is not only neceſſary to the improvement of our perceptive, but is eſſential to the operation of all our intellectual faculties. How much memory depends upon it, is known to all. By habitual exerciſe its operation becomes ſo quick, as to require, in ſome inſtances, no inconſiderable degree of reflection, to make us ſenſible of its having actually been exerted.

Dr. Stewart, with that enlightened penetration which characterizes all his obſervations, has traced the operation of attention in ſome of thoſe actions, which philoſophers had formally conſidered as mechanical. He has, I think, moſt ſatisfactorily proved, that the moſt rapid performer in muſic muſt neceſſarily pay attention to every note he plays, though his attention is ſo evaneſcent as to leave no conſciouſneſs of its exertion. I cannot pretend to improve upon his illuſtrations: but I may be permitted to give an exam-

ple more familiar to my own ſex, than thoſe which he has adduced.

You I know can knit: and can do it ſo well that you may have forgot the proceſs of learning it. Take then one of your children, who knows nothing of the matter, and in teaching her, you will obſerve the difficulty of the operation. The poſition of the needles muſt firſt be attended to; then the thread muſt be twiſted round the proper finger; then the ſtitch muſt be lifted by the needle; then the fore-finger of the right hand muſt caſt the thread round the needle, which muſt then be returned through the ſtitch; and finally, the ſtitch muſt be gently dropped by the needle in the left-hand, without injury to the reſt. Every one of theſe operations requires a ſeparate and fixed attention: and yet by habit they come to be performed ſo rapidly, that we appear to give them no thought. By habit I can perform all theſe operations, while reading a book that ſeems to require my whole undivided attention. According to the opinion of the juſtly-celebrated Hartley, my mind has now no concern in this proceſs. He would ſay, that the motions of my fingers 'cling to one another in the way of aſſociation, the acts of volition (or will) growing leſs and leſs expreſs all the time, till at laſt they become evaneſcent and imperceptible.' But that the attention is ſtill, however imperceptibly, engaged, is evident from this, that the moment I drop a ſtitch, it is taken notice of; and that, however deeply engaged in my ſtudies, I do not forget to turn the ſtitch that marks the ſeam at every ſecond round.

Should any grave philoſopher deign to look into theſe pages, I will permit him to ſmile at this ſimple illuſtration, which he may, if he pleaſes, call, *argumentum ad feminam*; but if it aid my deſign of exhibiting the power of attention, as eſſential in every voluntary operation of mind or body, it will fully anſwer the purpoſe for which I intended it.

The great object of this imperfect, though perhaps too tedious, examination of the faculty of attention, is to impreſs a conviction of the neceſſity of its early and aſſiduous cultivation. In this we are happily aſſiſted by that curioſity, which even in the dawn of intellect is obvious in the infant mind. When this curioſity calls forth attention, let us not counteract the wiſe deſigns of nature; let us rather be aſſiſting in bringing to perfection the plan which ſhe has in a manner ſketched. In the examination of ſenſible objects, let all the ſenſes be duly exerciſed, that the indiſtinct ideas received through the medium of one of the ſenſes may be fully cleared and explained by the others.

Here is a ball of white cotton, there is one covered with white leather, and there another of ivory; not only ſight, but feeling, and hearing, muſt be exerciſed, before a child can diſcriminate the properties that conſtitute their eſſential differences. In doing this, how many powers of the mind muſt be employed, in all of which attention is implied as an eſſential?

As the ſphere of obſervation enlarges, the objects of attention multiply on every ſide; upon theſe the judgment now begins to be frequently exerciſed, and the rudiments of invention appear. The moſt effectual aid which we can give to the progreſs of theſe powers, is to provide for their proper exerciſe. The child who is for ever cooped up in a nurſery, and who has no other objects whereon to exerciſe its curioſity and attention, ſave a few pretty painted toys, will ſoon have its curioſity checked, and its power of attention weakened. In theſe circumſtances, neither judgment nor invention can be expected to diſplay themſelves at an early period. They are both conſtantly anticipated by the provident care of the attendants, in whom it would be a breach of duty to let little maſter have the trouble of acting or thinking in any inſtance for himſelf.

Nor where the circumſtances of pa-

rents happily forbid the attendance of a train of mercenary mind-perverters, are the children always permitted to reap the advantage of their ſituation. Too often have I beheld the budding intellect as effectually nipped by the injudicious anticipations of an indulgent mother, as it could have been by the moſt fooliſh nurſery-maid. Children who are accuſtomed to this ſpecies of conſtant ſuperintendance and prevention, have no inducement to the acquirement of thoſe habits of attention, which I conſider as the baſis of all intellectual improvement.

'You can't open that pretty box, love; come to me, and I will do it for you. See! what nice comfits there are in it!' The box is opened, the comfits are eaten, and mamma again ſcrews on the lid.—Pleaſed with the novelty, little maſter again deſires to have it opened, and again ſhe complies with his requeſt. The requeſt, or rather command, is again repeated, and complied with; till mamma grows tired, and then ſhe declares that the naughty box will not open any more! The ill-humour which ſucceeds, is ſtifled by more comfits from her pocket, or the poor child is coaxed to reſume the ſtring by which the painted horſe is dragged round the room. All this I have ſeen, and ſimilar occurrences may be now in your recollection. Let us ſee how the ſame circumſtance is managed by a judicious mother.

'Here is a pretty box, mamma; but it won't open, all that I can do.'

"That box, my dear, won't open by force; the lid is ſcrewed on, and it muſt be turned in ſuch a manner as to take out the ſcrew. Obſerve. There! it is opened! now ſee how the part that fixes, is cut in the manner of a ſcrew."

'O! yes, now I underſtand it; for I remember what papa told me one day about the cork-ſcrew, when I was looking at it: but I thought there was no uſe of ſcrews, but to draw corks.'

"All ſcrews are made upon the ſame plan, or principle, as it is called; will you remember that word?"

'Yes, mamma; but what elſe is there beſide cork-ſcrews and ſcrew-lids for comfit boxes?'

"Many things, my love, are made upon the ſame principle. A piece of furniture that is juſt by you, is made upon the principle of the ſcrew; and if you will find it out, I will give you a kiſs."

'I ſee! I ſee! it is the ſtool on which my ſiſter ſits at the piano-forte. It turns and riſes juſt like the lid of this box.'

This ſcene I have likewiſe witneſſed. Does it require any argument to prove which of theſe children would be moſt likely to pay attention to the objects of perception? Can we be at any loſs to determine, which would be beſt prepared for receiving inſtruction at that period, when, in the minds of unthinking people, inſtruction commences?

As my portraits are all drawn from real life, I ſhall, if you pleaſe, take a view of two families brought up on the oppoſite principles I have here ſtated. The parents of each family were equally fond of their offspring. The children were equally promiſing; and, had the management of their early years been equally judicious, I have every reaſon to believe, that the intellectual endowments of the children of each family would have been much upon a par.

Mrs. X. was a domeſtic character, was much at home, and always with her children. Unfortunately for them, ſhe had conceived the idea that education was to be the work of their teachers, and that till they learned to read, they could learn nothing. To keep them out of harm's way, to amuſe, to feed, and to dreſs them, ſhe conſidered as duties; and piqued herſelf on giving up ſociety in order to devote herſelf to their performance. For their amuſement ſhe ſpared no expence in the purchaſe of toys; her ſitting-room was filled with the painted fragments of broken chariots and diſabled horſes. Freſh toys ſupplied the place of thoſe that were demoliſhed, and one of the active powers of

the mind was thus brought forth in the love of novelty. This ſhort-lived paſſion was ſucceeded by ſatiety, and ſatiety by diſguſt. If ever curioſity appeared, it was immediately repreſſed by thoſe fooliſh anſwers to every enquiry that are thought *ſo proper* for children.

At length the appointed period for learning to read arrives. Induced by the pretty book, by novelty, and the reward of ſugar-plums, the child gets acquainted with its letters. Novelty then ceaſes to operate; the pretty book has loſt its charms, and ſugar-plums are no rarity. No matter; the leſſons muſt go on in regular courſe. The poor child, who never from the hour of its birth has had its attention exerciſed upon any object whatever, muſt now attend. Without any diſtinct idea upon any ſubject, without any link in the chain of aſſociation, it muſt now learn to repeat words that are ſet down for it. It has no curioſity to be gratified; nor, indeed, is curioſity endeavoured to be excited. But as all little maſters and miſſes of ſuch an age learn to read, it too muſt learn at all events. What is the natural conſequence? The child acquires an inſuperable averſion to reading, which long operates as a bar to every improvement. That this really happens, I can aver from actual experience; having known a child exactly thus brought up, who, at nine years of age, would grow pale at the ſight of a book, and at the propoſal of reading would, by the fallen countenance and dejected eye, plainly evince the moſt deep-felt averſion.

In proportion to the vivacity or dullneſs of the power of conception, this averſion will be the more or leſs unconquerable. Where conception is languid, it will probably remain fixed for life; and the only reading that people of this deſcription will ever take to, is works of fancy. In thoſe the languid imagination is aided, indolence is gratified, and the mind that is incapable of combining images for itſelf, enjoys a ſort of childiſh pleaſure in ſurveying thoſe that are held up to it by others.

Let us now turn to Mrs. Z. the mother who taught her ſon the properties of one of the principles of mechanics, in unſcrewing his toy. In this little incident, an example has been already given of the method ſhe took to call the attention of her children to an accurate examination of every object that came within the ſphere of their obſervation. Every field flower which they gathered in their walks, every pebble which they picked up in the road, was a ſource of new ideas to their tender minds. Curioſity was thus awakened, turned to its proper objects, and ſo judiciouſly gratified, as to lay the foundation of a love of knowledge the firſt ſtep to all improvement. Reading was taught with eaſe, and conſidered by the children in the light of a privilege, rather than a taſk. To keep the deſire of information alive in the mind, curioſity was often but partially gratified; and full information referred to the period when the children might themſelves acquire it from books.

How effectually the love of reading may be thus inſpired, will appear from the following incident: the eldeſt little boy of a family brought up exactly as I have deſcribed, when about nine years of age, was put to ſleep in a room where ſome old books were kept in an open cloſet; among theſe was Pope's tranſlation of the Iliad, which ſoon attracted the young gentleman's attention. So delighted was the boy with its peruſal, that, as it afterward appeared, he uſed to watch the firſt dawn of day, (and it was then the middle of ſummer) take his book into bed, and read with avidity for hours before the family were aſtir. This might never have been known, but for a query which he put to his mother, to whom he conſtantly applied for aſſiſtance in every difficulty. That which now perplexed him, might have poſed more able critics; I ſhall

give it in his own words. 'Pray, mamma,' ſaid he, 'what was the reaſon that Venus, who was quite a *true goddeſs*, could not make her ſon Æneas immortal; while Thetis, who was but a ſort of *half-goddeſs*, could confer immortality upon hers?'

Do you not conceive, my dear friend, nay, do you not *feel*, how the heart of the parent muſt have thrilled at this proof of penetration and ſagacity in her darling boy? What a charming opportunity of explaining the nature of fabulous poetry; of giving diſtinct ideas of heathen mythology; and of impreſſing upon the mind a clear perception of the ſuperiority of a ſublimer ſyſtem! In the hands of ſuch a mother, we may believe that ſuch an opportunity would not be loſt.

You will, perhaps, attribute all this to the effect of extraordinary genius. That this child was not a boy of ordinary capacity, I muſt allow; but ſtill I am of opinion, that had he been brought up from the cradle as the children of Mrs. X. were brought up, had his attention never been awakened to the objects of perception, had his early curioſity been repreſſed, and no aſſiſtance given to his mind in the formation of its ideas, his conceptions muſt have been neceſſarily ſo much leſs lively, ſo much leſs accurate and diſtinct, that his genius, at the time we ſpeak of, would have been far from appearing extraordinary.

Far from conſidering all to be born with the ſame degree of intellectual capacity, I believe there are different degrees of ſtrength and vigour in the intellect as well as the corporeal frame. But let not this analogy carry us too far; let us not imagine that the mental, like the bodily, powers, will expand of their own accord. Nature has provided for the preſervation of a certain degree of ſtrength, beauty, and proportion, in the ſpecies, by ordaining that where theſe are greatly deficient, the race ſhall ſoon become extinct; but the race of fools may, alas! be multiplied without end.

The utmoſt care that can be beſtowed on the improvement of the periſhable fabric, can add but little to its ſtrength; whereas the mind—the immortal, the imperiſhable part—is happily ſo formed, as to be ſuſceptible of progreſſive improvement through the ages of eternity. The wiſdom, the knowledge, of every generation is an accumulated treaſure that deſcends to its poſterity. We in this age are born to a rich inheritance; let us not, like prodigals, ſquander it upon unprofitable trifles; let us rather put it out to intereſt, that the capital of the ſucceeding age may be increaſed. The ſureſt method of effecting the increaſe of this intellectual ſtock is to lay a foundation for the improvement of the mental powers, by an attention to their cultivation from the earlieſt period of their exiſtence. For this purpoſe we muſt obſerve, (and the obſervation cannot be too often urged) that the appearance of the different faculties of the mind is not ſimultaneous, but progreſſive. We too frequently expect every thing from reaſon; but if the preparatory faculties are neglected, reaſon will never ripen to maturity. It is they which muſt afford the materials on which reaſon is to operate. Nature has afforded a ſpace for their exerciſe; ſhe has given time for their attaining ſome degree of vigour, befor reaſon is brought forth. It is in not attending to her wiſe regulations, that all our errors in education originate. Let us ſtudy her laws, and in them admire the bleſſed proviſion which the divine ſource of all perfection has made for the happineſs and improvement of his rational offspring!

The POSSIBILITY *of preventing, and of averting, the* EFFECTS *of* THUNDER.

[From Euler's Letters on Phyſics and Philoſophy.]

IT has been aſked, whether it might not be poſſible to prevent, or to avert, the fatal effects of thunder? You are well aware of the importance of the queſtion, and under what obligation I ſhould lay a number of worthy people, were I able to indicate an infallible method of finding protection againſt thunder.

The knowledge of the nature and effects of electricity, permits me not to doubt that the thing is poſſible. I correſponded ſome time ago with a Moravian prieſt, named Procopius Diviſch, who aſſured me that he had averted, during a whole ſummer, every thunder-ſtorm which threatened his own habitation and the neighbourhood, by means of a machine conſtructed on the principles of electricity. Several perſons, ſince arrived from that country, have aſſured me that the fact is undoubted, and confirmed by irreſiſtible proof.

But there are many reſpectable characters, who, on the ſuppoſition that the thing is practicable, would have their ſcruples reſpecting the lawfulneſs of employing ſuch a preſervative. The ancient pagans, no doubt, would have conſidered him as impious, who ſhould have preſumed to interfere with Jupiter, in the direction of his thunder. Chriſtians, who are aſſured that thunder is the work of God, and that Divine Providence frequently employs it to puniſh the wickedneſs of men, might with equal reaſon alledge, that it was impiety to attempt to oppoſe the courſe of ſovereign juſtice.

Without involving myſelf in this delicate diſcuſſion, I remark that conflagrations, deluges, and many other general calamities, are likewiſe the means employed by Providence to puniſh the ſins of men; but no one, ſurely, ever will pretend, that it is unlawful to prevent, or reſiſt, the progreſs of a fire or an inundation. Hence I infer, that it is perfectly lawful to uſe the means of prevention againſt the effects of thunder, if they are attainable.

The melancholy accident which befel Mr. Richmann at Peterſburgh, demonſtrates, that the thunder-ſtroke which this gentleman unhappily attracted to himſelf, would undoubtedly have fallen ſome where elſe, and that ſuch place thereby eſcaped; it can therefore no longer remain a queſtion whether it be poſſible to conduct thunder to one place in preference to another; and this ſeems to bring us near our mark.

It would, no doubt, be a matter of ſtill greater importance, to have it in our power to diveſt the clouds of their electric force, without being under the neceſſity of expoſing any one place to the ravages of thunder; we ſhould, in that caſe, altogether prevent theſe dreadful effects, which terrify ſo great a part of mankind.

This appears by no means impoſſible; and the Moravian prieſt, whom I mentioned above, unqueſtionably effected it; for I have been aſſured, that his machinery ſenſibly attracted the clouds, and conſtrained them to deſcend quietly in a diſtillation, without any but a very diſtant thunder-clap.

The experiment of a bar of iron, in a very elevated ſituation, which becomes electric on the approach of a thunder-ſtorm, may lead us to the conſtruction of a ſimilar machine, as it is certain, that in proportion as the bar diſcharges its electricity, the clouds muſt loſe preciſely the ſame quantity; but it muſt be contrived in ſuch a manner, that the bars may immediately diſcharge the ether which they have attracted.

It would be neceſſary, for this purpoſe, to procure for them a free communication with a pool, or with the bowels of the earth, which, by means of their open pores, may eaſily receive a much greater quantity of ether, and diſperſe it over the whole immenſe extent of the earth, ſo that the compreſſion of the ether may not become ſenſible in any particular ſpot. This communication is very eaſy by means of chains of iron, or any other metal, which will, with great rapidity, carry off the ether with which the bar are ſurcharged.

I would adviſe the fixing of ſtrong bars of iron, in very elevated ſituations, and ſeveral of them together, their higher extremity to terminate in a point, as this figure is very much adapted to the attraction of electricity. I would, afterward, attach long chains of iron to theſe bars, which I would conduct under ground into a pool, lake, or river, there to diſcharge the electricity; and I have no doubt, that after making repeated eſſays, the means may be certainly diſcovered of rendering ſuch machinery more commodious, and more certain in its effect.

It is abundantly evident, that on the approach of a thunder-ſtorm, the ether, with which the clouds are ſurcharged, would be tranſmitted in great abundance into theſe bars, which would thereby become very electric, unleſs the chains furniſhed to the ether a free paſſage, to ſpend itſelf in the water, and in the bowels of the earth.

The ether of the clouds would continue, therefore, to enter quietly into the bars, and would, by its agitation, produce a light, which might be viſible on the pointed extremities.

Such light is, accordingly, often obſerved, during a ſtorm, on the ſummit of ſpires, an infallible proof that the ether of the cloud is there quietly diſcharging itſelf; and every one conſiders this as a very good ſign, of the harmleſs abſorption of many thunder-ſtrokes.

Lights are likewiſe frequently obſerved at ſea, on the tops of the maſts of ſhips, known to ſailors by the name of Caſtor and Pollux; and when ſuch ſigns are viſible, they conſider themſelves as ſafe from the ſtroke of thunder.

Moſt philoſophers have ranked theſe phenomena among vulgar ſuperſtition; but we are now fully aſſured, that ſuch ſentiments are not without foundation; indeed they are infinitely better founded than many of our philoſophic reveries.

Observations *on the* Plants *by which the* Indians *of* America *preſerve themſelves from the* Bite *of venomous* Serpents.

[Communicated to Count Rumford by Don Pedro d'Orbies y Vargas.]

THE abundance of venomous ſerpents found in the warm diſtricts of America has rendered it neceſſary for the unfortunate Indians and negroes, who traverſe the woods always barefooted, to ſearch out the moſt efficacious remedies for the diſagreeable effects produced by the bite of theſe animals. Of the remedies hitherto diſcovered, none is equal to the juice of a plant of the creeping kind called *vejuco du guaco*; for it not only cures the maladies ariſing from the bite of erpents, but preſerves from theſe effects thoſe who have drunk of it before they are bitten; ſo that the negroes and Indians acquainted with this plant, lay hold, with their naked hands, of the moſt venomous ſerpents without ſuſtaining any injury from them. This knowledge, of which they formerly made a great myſtery, gave them much importance in the country; and there is no doubt that they gained a great deal of money, both from thoſe who were bitten by ſerpents, and from thoſe who were deſirous, through curioſity, to ſee

them handle theſe dangerous animals.

Being born in the kingdom of Santa-Fé, belonging to South America, I had often heard the inhabitants boaſting of the great ability of theſe negroes, whom my countrymen call *empirics*. But as in the capital, where I was educated, which lies in a cold diſtrict, there are no venomous ſerpents, I had no opportunity of ſeeing any till the year 1788, when, being at Margerita, I heard of a ſlave who had a great reputation as being invulnerable to ſerpents, and who belonged to a gentleman of that place. As I was reſolved to examine him myſelf, I begged his maſter to ſend for him, with a ſufficient proviſion of ſerpents; which he readily conſented to do.

On the 30th of May, the ſame year, the negro came to the houſe where I reſided with one of the moſt venomous ſerpents of the country, which he had put into a calabaſh; a kind of veſſel employed by theſe people for the ſame purpoſes as bottles are employed in Europe. Having informed him that I was deſirous of ſeeing a ſpecimen of his talents, he replied that he was ready to gratify my curioſity, and, taking the ſerpent from the calabaſh, handled it with ſo much confidence and compoſure, that I imagined he had previouſly deprived it of its teeth that contained the poiſon. I therefore cauſed him to open its mouth: but I ſaw that it ſtill had its teeth; and was convinced that the negro poſſeſſed ſome ſecret for ſoothing it, for it appeared as tame and harmleſs as the moſt innocent animal could have been. After a long converſation with the negro, of whom I aſked ſeveral queſtions, to which he gave the moſt pertinent anſwers, I informed him how much I ſhould be gratified if I could be enabled to handle ſerpents with the ſame ſecurity; and finding that he was not averſe to procure me that ſatisfaction, I offered him a recompence, with which he ſeemed ſatisfied. Next morning he returned with the leaves of the plant in queſtion, which he moiſtened, and, having bruiſed them in my preſence, made me drink two large ſpoonfuls of the juice.

He then made three inciſions between my fingers in each hand, in which he inoculated me with the ſame juice: he performed a ſimilar operation on each foot, and on each ſide of my breaſt. When theſe operations were finiſhed, he informed me that I might lay hold of the ſerpent. I made ſeveral obſervations to him in regard to the diſagreeable conſequences to be apprehended in caſe I ſhould be bit by the animal; but finding that he ſeemed confident in his ſkill, I reſolved to take it into my hands without any fear; which I did ſeveral times, the animal never making the leaſt attempt to do me any injury. One of the individuals, however, who were in the houſe, being deſirous to run the ſame riſk, was bit by the ſerpent the ſecond time he took it in his hand; but without any further inconvenience than a ſlight inflammation in the part.

Two of my domeſtics who had been alſo inoculated, encouraged by this firſt attempt, went out into the fields and ſoon brought with them another kind of ſerpent, equally venomous, without ſuſtaining any hurt from it. In a word, I have caught ſeveral ſince that time without any other preparation than that of having drunk a little juice of the *vejuco du guaco*; and after repeating theſe trials, either on myſelf or my domeſtics, and always with the completeſt ſucceſs, I reſolved, in 1791, to give a memoir on this remarkable antidote in a periodical paper publiſhed every week at Santa-Fé. I added a deſcription of the plant, and every thing that appeared to me neceſſary for rendering public and general this diſcovery ſo uſeful to mankind. An account of all my experiments, and of the perſons who were preſent, will be found in that paper, dated Sept. 30, 1791.

I ſhall here only obſerve, that the

tradition current among the Indians and negroes of the vice-royſhip of Santa-Fé, reſpecting the manner in which the virtue of this plant was diſcovered, is as follows:—A biad of the kite kind, deſcribed by Cateſby, under the name of the ſerpent-hawk, feeds chiefly upon ſnakes in the hot and temperate regions of that part of America. This bird has a monotonous cry, ſometimes very diſagreeable by its repetition, which imitates the articulated word *guaco*, on which account the inhabitants have given it that name; and theſe people ſay, that when it cries it is to call forth the ſerpents, over which it exerciſes a certain kind of authority. They add other extravagant fables: but it is certain that the *guaco* purſues them wherever it finds them; and that the Indians and negroes, who ſpend the greater part of their time in the foreſts and open fields, aſſert, that to take them with more ſafety they prepare themſelves by eating ſome leaves of the plant in queſtion. This may be true; they may have diſcovered the virtue of it, and experienced it with ſucceſs. In this caſe, as in many others, the inſtinct of animals has been of uſe to us.

In regard to the plant, its genus has not yet been claſſed in any book of botany I have ever ſeen; and for that reaſon I ſhall venture to give a deſcription of it as well as I can. The root is fibrous, and extends in every direction. The ſtem is ſtraight, perfectly cylindric when the plant is tender, but when old becomes pentagonal, that is to ſay, acquires ſalient angles. The leaves which grow on the ſtem ſtand oppoſite to each other; are ſhaped like a heart; have a dark green colour intermixed with violet; are ſmooth on the lower ſide, rough on the upper, and ſomewhat velvety: its corymbiferous flowers are yellow, floſculous, and have four fleurons in each common calyx. The corolla is monopetalous, infundibuliform, with five indentations; and contains five ſtamina, united by antheræ in the form of cylinders, which embrace the ſtyle. The ſtyle has a ſtigma deeply divided, and the calyx contains ſeveral broad ſeeds, each with a ſilky aigrette.

The plant is vivacious, and is found in the hot and temperate regions of the vice-royſhip of Santa-Fé; it is, in general, fond of growing on the borders of rivulets and in ſhady places, rather than in the open plains. Nature has not produced it in the elevated or cold diſtricts of this continent; and for this reaſon, no doubt, that its virtue would be uſeleſs, as there are no venomous ſerpents but in the countries where it grows.

HISTORY *of the* LONDON BREWERY, *from the Beginning of King* WILLIAM's *Reign to the preſent Time.*

IN the beginning of king William's reign, the duty on ſtrong beer, or ale, was 1s and 3d per barrel: the brewer then ſold his brown ale at 16s per barrel, and the ſmall beer (which was made from the ſame grains) at 6s per barrel. Theſe were moſtly fetched from the brewhouſe by the cuſtomers themſelves, and paid for with ready money; ſo that the brewer kept but few ſervants, fewer horſes, had no ſtock of beers or ales by him, no purchaſing of leaſes of public houſes, no bad debts, and but a trifling number of caſks, and his money, conſequently, returned before he either paid his duty, or for his malt. The victualler then ſold his ale for two pence per quart. Soon after, our wars with France occaſioned further duties on this commodity. In the year 1689, ninepence per barrel more was laid upon ſtrong beer, and threepence per barrel on ſmall beer. In 1690, the duty was advanced 2s and 3d per barrel on ſtrong beer, and ninepence per barrel upon ſmall; and in 1692, an additional duty of ninepence per

barrel was laid upon ſtrong beer only. At this period the brewer raiſed his price from 16s to 18s and 19s per barrel; and the victualler raiſed his price to 2½ per quart. Now we come to the queen's time, when, France diſturbing us again, the malt tax, the duty on hops, and that on coals, took place; and, as the duty on malt ſurpaſſed that on hops, the brewers endeavoured at a liquor wherein more of the latter ſhould be uſed: thus, the drinking of beer became encouraged in preference to ale. This beer, when new, they ſold for 22s per barrel; and, at the ſame time, advanced their ale to 19s and 20s per barrel; but the people, not eaſily weaned from their heavy, ſweet drink, in general drank ale mixed with beer from the victualler at 2½d to 2¾d per quart. The gentry now reſiding in London more than they had done in former times, introduced the pale ale and pale ſmall beer, which they were habituated to in the country, and either engaged ſome of their friends, or the London brewers, to make for them theſe kinds of drink; and affluence and cleanlineſs promoted the delivery of them in the brewers own caſks, and at his charge. Pale malt being deareſt, the brewer being loaded with more tax and expence, fixed the price of ſuch ſmall beer at 8s and 10s per barrel, and the ale at 30s per barrel: the latter was ſold by the victualler at fourpence per quart, and under the name of two-penny. This little oppoſition excited the brown beer trade to produce, if poſſible, a better ſort of commodity, in their way, than heretofore had been made. They began to hop their mild beers more, and the publican ſtarted three, four, or ſix butts at a time; but ſo little idea had the brewer, or his cuſtomer, of being at the charge of ſtocks of beer, that it gave room to a ſet of monied people to make a trade, by buying theſe beers from brewers, keeping them ſome time, and ſelling them, when ſtale, to victuallers, for 25s or 26s per barrel.

Our taſtes but ſlowly alter or reform. Some drank mild and ſtale beer; others, what was then called three-threads, at threepence per quart; but many uſed all ſtale, at fourpence per quart. On this footing ſtood the trade until about the year 1722, when the brewers conceived that there was a mean to be found preferable to any of theſe extremes; which was, that beer ſhould be well brewed, and from being kept its proper time, becoming mellow *(i. e.* neither new nor ſtale) it would recommend itſelf to the public. This they ventured to ſell at 23s per barrel, that the victualler might retail it at threepence per quart. Though it was ſlow, at firſt, in making its way, yet, as it was certainly right in the end, the experiment ſucceeded beyond expectation. The labouring people, porters, &c. found its utility; from whence came its appellation of porter, or entire butt. As yet, however, it was far from being in the perfection which we have ſince had it.

Porter was, at different times, raiſed to 30s per barrel, where it remained till the year 1799, and was retailed at 3½d per quart, when, in conſequence of malt riſing in price to, from 4l to 4l 10s and 5l per quarter, and hops from 4l 10s to 17l, 18l and 20l per cwt. porter was raiſed to 1l 15s per barrel, and retailed at fourpence per quart. Ale, likewiſe, experienced a riſe of from 2l 2s to 2l 12s 6d per barrel.

ANECDOTES *of the late* JOHN BACON, *Eſq. R. A.*

AT the time Mr. Bacon was putting up the monument of lord Chatham, a miniſter, to whom Mr. Bacon was an utter ſtranger, was walking through the abbey, and coming unſeen, tapped Mr. Bacon on the ſhoulder, ſaying, 'Take care what you are about, you work for eternity,' alluding to the ſtory of Xeuxes. It happened the next morning that Mr.

Bacon heard this gentleman deliver a diſcourſe from the pulpit, and watching him in his paſſage to the veſtry, he came behind him, and tapping him in a ſimilar manner, ſaid, 'Take care what you are about—*you* work for eternity.'

While Mr. Bacon was walking one day in Weſtminſter-abbey, he obſerved a perſon ſtanding before his principal work, who ſeemed to pride himſelf on his taſte and ſkill in the arts, and who was exuberant in his remarks.—'This monument of Chatham,' ſaid he to Mr. Bacon (whom it is evident he miſtook for an ignorant ſtranger) 'is admirable upon the whole; but it has great defects.'—'I ſhould be greatly obliged,' ſaid Mr. Bacon, 'if you would be ſo kind as to point them out to me.'—'Why here,' ſaid the critic, 'and there—do you not ſee? bad—very bad!' at the ſame time employing his ſtick upon the lower figures with a violence that was likely to injure the work.—'But,' ſaid Mr. Bacon, 'I ſhould be glad to be acquainted why the parts you touched are bad?' He found, however, nothing determinate in the reply; but the ſame vague aſſertions repeated, and accompanied with the ſame violence. 'I told Bacon,' ſaid he, 'repeatedly of this, while the monument was forming—I pointed out other defects, but I could not convince him.'—'What then, you are perſonally acquainted with Bacon?' ſaid Mr. Bacon, 'O yes,' replied the ſtranger, 'I have been intimate with him for many years.' 'It is well for you then,' ſaid Mr. Bacon, taking leave of him, 'that your friend Bacon is not now at your elbow, for he would not have been well pleaſed at ſeeing his work ſo roughly handled.'

Mr. Bacon had a talent for invention, which he ſometimes indulged in the compoſition of apologues, of which the following is a ſpecimen.

THE MIRROR AND THE PICTURE: A FABLE.

A MIRROR, placed in a painter's ſtudy, thus vaunted itſelf againſt a deſign on the eaſel: 'Can you,' ſays the Mirror, 'covered with blots and ſcratches, pretend to vie with me, who exhibit ſo preciſe an image of every thing that comes before me! and where the variety is as great, as the reſemblance is exact.' 'I grant,' replied the Canvas, 'that all my excellence conſiſts in faithfully returning whatever is committed to my charge; but it might ſerve as a check to your pride to conſider, that after you have been the companion of the wiſeſt and beſt of characters, your are ready to admit a fool, or embrace a harlot.'

MORAL.

The ſame objects and events which the ſuperficial ſuffer to paſs without a trace left behind, become a fund of knowledge to the diligent; which, being enriched with principle, and fixed by habit, they ſtand among mankind a repoſitory of all that is wiſe, and an example of all that is good.

On the INFLUENCE *which the* SUN *has on the State of the* BAROMETER.

By J. J. HEMMER.

WHEN philoſophy, in modern times, emerged from that lamentable ſtate of darkneſs in which it was for many years involved, and philoſophers employed the more rational and certain way of obſervation and experience for examining the nature of things, all the aſſertions and opinions of the ancients reſpecting the influence of the heavenly bodies were ſubjected to more accurate inveſtigation. Some, as being contrary to experience, were totally rejected; others were retained, and placed beyond all doubt, as they evidently coincided with nature; and others were claſſed among uncertainties, as experience furniſhed nothing deciſive for or againſt them. Among the number of the latter, according to moſt modern philoſophers, is the opi-

nion that a part of the wonderful variations which we obſerve in the barometer are to be aſcribed to the effects of the ſun and moon, and other heavenly bodies. This opinion, indeed, after a long ſeries of experiments and reſearches, appeared to Paſcal, Garzin, Wallis, Halley, De la Hire, Mariotte, Woodward, Leibnitz, Mairon, Bernoulli, Muſchenbroek, De Luc, &c. ſo little ſupported by proof drawn from nature, that they did not think proper to mention it. This, however, is much to be wondered at in regard to De Luc, as he ſays in his work on the atmoſphere, that it is attracted with more or leſs force by the planets, according to their different diſtances.

Some celebrated philoſophers, however, of the preſent day, have confidently believed, that if the variations of the barometer were carefully compared with the different poſitions and diſtances of the heavenly bodies, and particularly of the ſun and moon, it would be found that many conſiderable variations of the ſtate of the mercury in the Torricellian tube are effected by them. For, as the flux and reflux of the ſea depend on the ſun and moon, it cannot be doubted that in the atmoſphere of the earth, which is much lighter than the water of the ſea, movements of the ſame kind, which have an influence on the barometer, muſt take place. The firſt experiments on this ſubject were made about fifteen years ago by the celebrated Lambert, who employed for that purpoſe eleven years obſervations of the barometer made by Doppelmayer of Nuremberg, and compared them with the apogeum and perigeum of the moon. He was not able, however, to obtain any certain reſult, and conſidered the period of the obſervations as too ſhort.

Toaldo, who was furniſhed with much more abundant materials, reſumed the ſubject, and by means of the forty years obſervations of the marquis de Poleni, and ſon, with eight years of his own, had a ſeries of forty-eight years obſervations. After a laborious compariſon of theſe with the apſides, ſyzigies, and quadratures of the moon, and with the paſſage of the moon and ſun through the ſigns of the zodiac, he thought he diſcovered undoubted proofs of a perceptible influence of the moon and ſun on the barometer. M. Friſi, of Milan, endeavoured to controvert this aſſertion, which had been the reſult of ſo much labour, and maintained that the variations of our atmoſphere have no ſimilitude to the flux and reflux of the ſea, and can admit of no compariſon, as the latter is regular and invariable, the former only temporary. The flux and reflux of the ſea, in regard to time and duration, are ſo certain, that there are tables of them for all the principal ſea-ports, which never err; whereas the variations of the atmoſphere are at the ſame time in different places, and in the ſame place at different times, ſo great, that where it rains at one period for three or four months it is ſometimes as long without rain. It ſufficiently appears at preſent, from mathematical calculations, that during the paſſage of the moon or ſun, from the horizon to the meridian, the daily height of the barometer cannot be changed more than $\frac{1}{48}$ of a line, Paris meaſure, by the effect of the former, and about $\frac{1}{100}$ by the effect of the latter.

To many, however, Friſi's reaſons did not appear ſo concluſive as to make them give over their reſearches on this ſubject; and in particular, moſt of the members of our meteorological ſociety, among whom M. Steiglehner, Planer, and Chiminello, have taken great pains. The firſt ſays, that he found, by ſeveral comparative obſervations, that the greateſt fall of the barometer does not happen in very remote places at the ſame time, but that it is earlier toward the weſt, and later toward the eaſt, and that the difference of the time is nearly equal to the difference of the meridians of the places; an aſſertion which indeed deſerves to be more accurately examined.

M. Planer obſerved the barometer

for a whole year, ſix times every day, or every fourth hour of the natural day, at two, ſix, and ten in the morning, and at the ſame hours afternoon; and found, in general, that the barometer, between ten in the morning and two in the afternoon, and between ten at night and two in the morning, was leſs in its riſing, and greater in its fall; and that the contrary was the caſe between the hours of ſix and ten in the evening and morning. M. Chiminello obſerved the barometer twenty-two times a day for three years, but he left a chaſm in the night which he ſupplied by calculation. The principal poſitions which he thence deduced, are, that the barometer falls toward noon, as well as toward midnight.

The obſervations of theſe three men afford ſome indications of the influence which the heavenly bodies have on the barometer, and to which M. Planer aſcribes part of the effects: but he is far from proving this; for the number of the places the obſervations were made at, which M. Steiglehner compared, were not above three, and conſequently too few to determine the queſtion. The caſe is the ſame with the ſix obſervations of M. Planer, made daily, as has been obſerved by M. Chiminello. And might not what is aſcribed to the period of four hours have happened in the laſt hour, or the laſt half-hour; Chiminello's experiments are of more importance, but for want of night obſervations they are ſtill defective and imperfect.

In this reſpect, however, I was more fortunate, as I had an eaſy and ſure method of following all the variations of the barometer, and even the ſmalleſt, by night as well as by day. I had in my poſſeſſion, at that time, a barometer, belonging to the Electoral Phyſical Muſeum, invented lately by M. Changeux, and called a barometrograph, which being connected with a clock ſhows the ſtate of the mercury every four minutes, by means of a point impreſſed on a moveable plate. I began on the 21ſt of May 1785, to make uſe of this excellent inſtrument, and it appeared to me, by repeated obſervation, that a continual variation took place toward noon as well as toward midnight. By more accurate obſervation, I found that this variation in the mercury conſiſts, at leaſt, in an inclination to fall. But that I might be more certain in treating a queſtion of ſo much importance, I reſolved to compare all the obſervations from the firſt day to the end of the year, which are printed in five volumes of our Ephemerides. In that time I found that the paſſage of the ſun over the meridian by day and by night had taken place 446 times, and conſequently as many variations of the barometer were to be conſidered. From the moſt accurate compariſon, the following three rules preſented themſelves:

1ſt, When the ſun paſſes the meridian, the barometer, if in the act of falling, continues to fall, and the falling is accelerated.

2d, When the ſun paſſes the meridian, the barometer, if in the act of riſing, falls, or becomes ſtationary, or riſes more ſlowly.

3d, When the ſun paſſes the meridian, the barometer, which is ſtationary, falls, if it has not riſen before or after being ſtationary; in which caſe it uſually becomes ſtationary during the ſun's paſſage.

The firſt rule had only one exception, the ſecond none, and the third ſix. The laſt were all in the night-time except one. On this occaſion, the barometer during the ſun's paſſage over the meridian ſtood ſtill, though it fell before and after. When theſe ſeven exceptions are deducted from the 446 variations there remain 439, which accord with the rules. When I ſay, however, that theſe variations took place during the ſun's paſſage over the meridian, I do not mean by that expreſſion the very moment when the ſun is exactly in the meridian, but the whole period when he is near it.

All theſe variations took place between eleven o'clock and half after one, conſequently within the ſpace of an hour and a half; except ſix, five of which happened half an hour or a quarter before eleven, and one about an hour after noon; which, indeed, muſt be aſcribed to a particular cauſe, which either haſtened or retarded the effect of the general cauſe. Of the abovementioned 439 variations, 54 took place after twelve o'clock, and all the reſt before one.

As it is therefore certain that the barometer during the paſſage of the ſun over the meridian is always inclined to fall, it cannot be doubted that the cauſe of ſuch an invariable a phenomenon, which follows ſuch remarkable laws, and recurs at the ſame time under the like circumſtances, muſt be conſtant and invariable. It is at preſent well known that the principal atmoſpheric cauſe of the falling of the barometer is heat and evaporation. But it appears, on cloſer examination, that neither of theſe can produce the phenomenon in queſtion. What M. De Luc, however, ſays, that the leaſt height of the barometer, when no particular cauſe intervenes, always takes place about the hotteſt part of the day, which in every ſeaſon is about $\frac{1}{4}$ of the artificial day, might lead to a ſuſpicion that the falling of the barometer about noon proceeds from the heat. For, as there is a conſiderable increaſe of heat about noon, a perceptible falling of the mercury about the ſame time muſt be connected with it, until, in the abovementioned part of the day, the mercury reaches its loweſt ſtate, and the heat attains to its maximum. But if we admit that the greateſt heat commonly takes place about the $\frac{3}{4}$ of the day, experience forbids us to aſcribe to the ſame period the greateſt falling of the mercury. I have therefore conſtructed a table in which the loweſt ſtate of the mercury for each day of the month, between noon and the evening, or night, is given from the abovementioned barometrographic obſervations. This ſtate of the barometer takes place when the mercury ceaſes to fall and afterward begins to riſe, or before riſing is ſtationary. When it does not riſe after noon, but ſinks continually or by intervals, the loweſt ſtate after noon muſt be at midnight. The caſe is the ſame when it firſt riſes after noon, and afterward falls toward the end of the natural day. But when it continually riſes after noon, though this movement may be interrupted by its once becoming ſtationary, the loweſt ſtate when it falls early, or when this does not happen, is to be conſidered as taking place about twelve at noon. When in this caſe a frequent falling takes place in the morning, I have obſerved that it was neareſt noon and the $\frac{3}{4}$ of the day: when the quickſilver roſe and fell ſeveral times between noon and evening, I marked ſeveral hours, without further examining at which the ſtate of the barometer was loweſt.

Now it appears from theſe tables, that in 222 days the loweſt ſtate of the barometer correſponded only ten times with the $\frac{3}{4}$ of the day; on the other hand, it deviated from that period ten times about half an hour, at other times a whole hour, and often half a day; and conſequently De Luc's rule, at leaſt according to my obſervations, is not correct.

We may therefore aſk thoſe who aſcribe the falling of the barometer to heat, Why ſhould this cauſe be ſo cloſely confined to the period between eleven in the morning and the middle of the firſt hour after midnight? Why does it not take place earlier or later, when the mercury riſes continually the whole day, or ſeveral days either fall a little toward noon, or at leaſt become ſtationary or riſe ſlowly? and why does not this rather take place ſeveral hours after noon, the time at which the heat generally is the greateſt?

But that heat is not the cauſe of this phenomenon is proved by the falling of the mercury at midnight; which is no leſs common and certain than the

falling at noon: on account of the cold, it ought then rather to riſe or to fall.

We may aſſert the ſame thing of vapour as of heat, as theſe have the cloſeſt connection with each other. As a certain accumulation of vapours diſſolved in the atmoſphere makes the air lighter, and obliges the barometer to fall, the power with which it acts on the inſtrument muſt be in proportion to its quantity. When it obliges the barometer, therefore, to fall toward noon, why does the latter ſo often riſe afterward? What then leſſens the quantity of theſe vapours when the heat, which by its nature promotes their ſolution, ſtill increaſes, or at any rate does not become leſs? How does it happen that the barometer falls in the night? as about that time the vapours are, for the moſt part, precipitated from the atmoſphere. Why do they exerciſe the greateſt force exactly at midnight? and, By what law of nature are they more connected with that than with any other period?

It may here evidently be ſeen, that the conſtant falling of the barometer about noon and midnight can be occaſioned neither by heat nor by the effect of vapours.

Beſide theſe two cauſes, and the winds, we are acquainted with no others in our atmoſphere which can make the barometer to fall. But as the wind often becomes calm about noon and midnight, or, when it blows, is of ſuch a nature that it does not make the column of air which preſſes on the barometer lighter, it is evident that the falling of the mercury about theſe times cannot ariſe from the wind.

What then remains but to ſeek without our atmoſphere for the cauſe of this phenomenon? It is evident that it is to be found in the ſun; for, as by its attraction it moves the water of the ocean, it muſt exerciſe a ſtill ſtronger action on the column of air; and from what is known reſpecting the flux and reflux of the ſea, the whole phenomenon may be eaſily explained. In the firſt place, as the atmoſpheric flux and reflux themſelves muſt depend on the ſun's paſſage over the meridian, it muſt alſo take place both at the diurnal and the nocturnal paſſage of the ſun; becauſe the flux and reflux of the atmoſphere, like thoſe of the ſea, muſt happen at the ſame time on oppoſite ſides of the terreſtrial hemiſphere. In the laſt place, the atmoſpheric flux which produces the falling of our barometer is only an effect of the flux which takes place, between the tropics, where the air during the paſſage of the ſun aſcends, and therefore proceeds thence from us, as happens in all the tides of the ſea which lie beyond theſe circles. That theſe tides, which ariſe by communication, are tranſmitted more ſpeedily and by a longer duration in the atmoſphere than in the ocean, may be concluded from this circumſtance, that the particles of the air have leſs gravity and leſs mutual adheſion.

SUGAR FROM THE BEET-ROOT.

DOCTOR Achard has publiſhed, at Berlin, the reſults of a ſecond trial, made on a large ſcale, to extract ſugar from the beet-root, under the direction of a commiſſion appointed for that purpoſe by his Pruſſian majeſty. By theſe reſults it appears that 1500 quintals of beet-root gave 5952 pounds of raw ſugar; 450 quintals of refuſe, and 100 ounces of ſyrup. Thirty quintals of beet-root, cultivated according to the proceſs of Achard, gave each ſix pounds three ounces of raw ſugar. The refuſe may be employed as coffee, or to diſtil ſpirit; and is more profitable for feeding cattle than beets themſelves. The raw ſugar may be refined for every purpoſe whatever. According to a calculation made by the commiſſion charged to examine this diſcovery, it will produce to Pruſſia an annual ſaving, or rather an advantage, of two millions and a half of rix-dollars.

THE GLEANER.

NUMBER XLI.

DECIPIMUR SPECIE.——HOR.

'A FARTHING coined in the reign of queen Anne has been within theſe few days ſold by an auctioneer, at a public ſale, for the ſum of 750l. ſterling! The peculiar reaſon for its bringing ſo great a price is, that it is one of three, which were the only farthings ſtruck in that reign.'

I am far from ſympathiſing in the contempt with which the buſy, the vulgar, and the ignorant are accuſtomed to regard the ſtudies and the diſtinguiſhing enthuſiaſm of the antiquary. A coin, a medal, a vaſe, a bit of brick, a fragment of indurated mortar, the carving on a piece of old half-rotten wood, has often won my attention from the moſt intereſting objects of common curioſity, has often excited my deſires, and exhauſted my purſe, in preference to things ten times more precious, for the immediate and groſs uſes of life. Such relics of antiquity are the only indiſputable evidences of hiſtorical truth. It ſhall frequently happen, that a fact of the higheſt importance in the progreſs of arts and nations ſhall be without other memorial than what an urn or a medal may ſupply. Problems in hiſtory, after long exerciſing in vain the ingenuity of the learned, and dividing their opinions, have been, in many inſtances, ſolved at once, upon the caſual diſcovery of ſome relic, in the eyes of all but the antiquary the moſt inſignificant. If, indeed, our knowledge of the paſt can aſſume any uſeful relation to our fortunes and conduct in the time which is preſent; then, whatever bears the character of a monument of ſome paſt remarkable event not otherwiſe ſatisfactorily commemorated, muſt acquire, even by this quality alone, infinite value in the judgment of the diſcerning.

Yet I cannot hear without ſurpriſe of ſo large a price as 750l. paid for a queen Anne's farthing. I cannot imagine how it ſhould acquire ſuch a value as a monument in the hiſtory of England, the only character in which it can be at all more eſtimable than any other farthing of any other coinage. Of the ſkill and elegance with which the Engliſh coinage was then executed, of the purity of the copper uſed in it, of the emblems and inſcriptions ſtamped upon the money, of the perſonal aſpect of the queen, or of aught elſe in the hiſtory of that reign, of which it can be very deſirable to have the evidence of a coin, I do not know that there is more to be learned from one of thoſe three farthings, than from the halfpence, ſhillings, guineas, and other coins of the ſame era, which have not been yet raiſed by their rarity to an extravagant imaginary value. No material fact would be loſt, were it even utterly forgotten that ever ſuch farthings were coined. On what principle then, even of antiquarian eſtimation, can a farthing be thought worthy to be purchaſed for ſo many pounds?

It was thus I wondered, and reaſoned with myſelf, my tea-cup and ſaucer ſtill in one hand, and the newſpaper which gave the intelligence in the other, as I ſat alone in my ſtudy a few evenings ſince; and was now ſipping of my favourite liquor, now lightening thought by a careleſs glancing on the paper, and now meditating with anxiety what topic I ſhould GLEAN from life or nature, to be here illuſtrated for the entertainment of my gentle readers. Thus I had reaſoned. But here I pauſed; for even the moſt obvious general truth will not always recur with inſtantaneous quickneſs to the mind, when there ariſes any new caſe of its application. I ſtrove to drive the whole

matter from my thoughts; but ſtill it returned. At laſt, I found the ſolution of the difficulty. There is no principle, ſaid I to myſelf, of juſt eſtimation, either mercantile or antiquarian, on which to account for the ſale of a farthing for ſo many pounds. But its value muſt have been exaggerated to the opinion of the purchaſer by the ſame deluſion of diſtempered fancy, the ſame feveriſh impatience of deſire, the ſame emulation in vain expence, the ſame pride of ſuperiority in connoiſſeurſhip, which are the cauſes of almoſt all the follies or crimes of human life, and which almoſt at every ſtep we take betray us into one diſadvantageous bargain or another.

I had now ſtarted game which it might not be unworthy of the moraliſt to run down. So I reſolved to purſue it.

Whenever you view the world, what is there in fact to be ſeen in human life, but perſons every where contending who ſhall purchaſe a farthing for the greateſt number of pounds?

To purſue the name, and but the name, of popular liberty, as the French have juſt purſued it, through ſuch a diſſolution of the bands of ſociety, ſuch a deſtruction of the great and of the ſmall, ſuch robberies, and ſuch ſacrifices, through ſo many crimes, and through ſo many ſufferings—Ah! what is this but to give even thouſands for a farthing, and to find your purchaſe, when you have graſped it at length in your hand, to be not even a farthing, but a bit of burning coal, or of moſt actively corroſive cauſtic?

The landholder or merchant ſhall expend half his fortune in carrying a conteſted election; and, when he has carried it, ſhall rarely attend in the Houſe, ſhall no more venture to ſpeak there than if he were a novice in the ſchool of Pythagoras, ſhall never think of thoſe principles and relations, according to which the legiſlature for his country ought to proceed, ſhall gain no enviable diſtinction, ſhall feel no peculiar happineſs, ſhall derive no clear emolument from the ſtation which he has beggared himſelf to attain and to preſerve. This man has ſurely not done more wiſely than if he had been bidding at an auction for a queen Anne's farthing, inſtead of canvaſſing for election into parliament.

A youth without fortune opens his eyes on the ſcenes of ſplendid, gay, and luxurious life in London. He becomes ambitious of greatneſs; he ſighs for the means of ſuch ſenſual gratifications as are in faſhion; he longs to cut a daſh in gay life. With the view of thus at length attaining the height of his wiſhes, he haſtens to India, or to ſome other diſtant land, to make his fortune. There, ſteady to his firſt purpoſe, he ſacrifices all the conſiderations of health, of a good conſcience, of a fair reputation, of liberal and rational enjoyment of the preſent bleſſings in his lot, to the care of accumulating wealth, with which he may one day purchaſe all that oſtentatious pomp, and that ſumptuous luxury, which firſt dazzled his imagination and ſeduced his heart. His purpoſe is accompliſhed; and he is rich to the utmoſt wiſh of avarice. Having made his fortune, he returns to enjoy it. Houſes, carriages, country-ſeats, a young wife, beauteous, gay, and faſhionable, all the luxury of the table, all the pride of attendance, all the joys of the opera, the theatre, the route, the maſquerade, the gaming-table, and the watering-places, are now at his command. For theſe he laboured, and ſpeculated, and extorted, and hoarded. He can command them; and he will have them. His deſire is, no longer to ſet bounds to his expence or to his enjoyments. But it will not do. His health is broken; his recollections are painful; his charming wife married his opulence, not himſelf; avoids his preſence, or maliciouſly ſtrives to teize him to death, and is impatient to enjoy his fortune without the incumbrance of ſuch a huſband. His appetites have

no longer the keenneſs of early youth. Even the gratifications which his vanity might find in ſplendour and expence, are loſt in the ſecret conſciouſneſs of the bitter diſappointment of his other hopes of joy. He finds that, in the acquiſition of wealth by ſuch means for ſuch an end, he has been in fact purchaſing a braſs farthing at the expence of thouſands of pounds.

That lovely young woman of ſeventeen years, with twenty thouſand pounds to her fortune, how impatient ſhe is to have a huſband! How many fortune-hunters flutter about her! Is it he, the moſt rakiſh and unprincipled of them all, that ſhe prefers? She thinks herſelf the moſt miſerable of human beings, that ſhe cannot this moment eſcape to his arms. But the time ſhall come. The vigilance of her guardians will at laſt be eluded. Herſelf, with her fortune, ſhall become the prize of her lover. Ah! then, how will ſhe find, that ſhe would have done better to purchaſe even but a queen Anne's farthing with her whole twenty thouſand pounds!

And pray, my lady ducheſs, was your management laſt ſeaſon greatly better, when, by your routes and your balls, your grand dinners, and your elegant *déjeunées*, your expences at the gaming-table, and the coſt of your eſtabliſhment, you conſumed all your lord's ready money, and ran him deep in debt with every tradeſman, without one hour of genuine joy to yourſelf, and with the ruin of your health and beauty, which neither doctor nor watering-place has been ſince able to repair? Ah no! You were all the while paying pounds upon pounds for counters and for farthings.

We all in our turns, and each in his own peculiar way, make, in reſpect to the principal concerns of human life, juſt as bad bargains as that made by him who paid his 750l. for a queen Anne's farthing. But when our attention is, by any ſuch incident as this, particularly fixed upon the folly of valuing any thing otherwiſe than by its relation to the real uſes of life; we ſhould not content ourſelves with making the remark in a general way, or with applying it in gay ridicule to ſome particular in the conduct of one or other of our neighbours. Let every one for himſelf ſeriouſly reflect how often he has been deluded by the ſemblances of things, has purſued ſhadows as if they had been the moſt precious realities, has purchaſed idle toys at an expence due only to objects of the deareſt value. Let every one examine what are the ends he ſeeks by his preſent toils and cares; and if he cannot unambiguouſly aſſure himſelf, that his objects are ſuch as he can purſue without foregoing that preſent happineſs which is to be found in the conſciouſneſs of the performance of duty; if he cannot aſſure himſelf, that in their attainment he ſhall attain to new perfection in knowledge and virtue; then let him inſtantly bid them farewell!

N.

On two NEW KINDS *of* OVIPAROUS QUADRUPEDS.

THESE two ſpecies, deſcribed by Lacepede, are intereſting not only on account of their novelty; they are intereſting alſo, as they exhibit a number of toes not before obſerved but in the claſs of reptiles.

The firſt, which Lacepede calls *monodactylos*, has indeed only one toe on each foot. Theſe feet are ſo ſhort, and the body and tail ſo long, that the animal has a great reſemblance to a ſnake; it is covered with ſcales diſpoſed in tranſverſal bands.

The other ſpecies, called *tetradactylos*, has feet as ſhort, and a body as long, as the preceding; but each foot is furniſhed with four toes, and the body is marked on each ſide with a longitudinal furrow.

Theſe two ſpecies will form hereafter two new genera in Lacepede's genera of *lizards*.

Description *of the* Imperial Palace *of* Michailoff.

[From the Life of Kotzebue, tranſlated by the Rev. B. Beresford.]

THE late emperor of Ruſſia, Paul I, ſays Kotzebue, was enamoured with this fairy caſtle, which roſe out of the earth, as it were by magic, and which had coſt between fifteen and eighteen millions of rubles; he preferred it to all his other habitations, and left, among the reſt, his Winter Palace, as it is called, a healthy and commodious building, to ſhut himſelf up among damp walls, down which the water ſtill continued to trickle.

He took up his abode in this mephitic manſion in the depth of winter, and was highly delighted with it. He felt much pleaſure in conducting his gueſts over the whole edifice, and in ſhowing them the various treaſures which he had procured at a vaſt expence from Paris and Rome. The extravagant praiſes which were of courſe laviſhed upon mere trifles, and the exclamation a thouſand times repeated that 'all was divine, *unique!*' at length poſſeſſed him with the idea of having drawn up a detailed deſcription of this eighth wonder of the world. He charged me with this taſk in the moſt flattering manner.—I complied immediately with the monarch's orders.

The deſcription of the palace was nearly completed when he died, and the greater part of the valuable articles which it contained were ſoon after removed. The building itſelf, as well as the whole arrangement of it, throws conſiderable light upon the taſte, and even the character of that prince.

This edifice ſtands at the confluence of the Moïka and the Fontanka, and occupies the ground on which the ſummer palace of Peter the Great had been erected. The empreſs Eliſabeth cauſed many alterations to be made therein: being built of wood, however, it ſoon fell into decay; and a Phœnix has riſen from its aſhes.

The garden ſtreet terminates with a portal. Eight doric columns of red marble, the produce of the country, ſupport a number of trophies, and three gates open between four pillars of granite. The emperor's cypher (interwoven with the Malteſe croſs) with eagles, crowns, and garlands, in gilt bronze, ornament the gates and palliſades. The middle gate is never opened except for the Imperial family. Theſe gates lead to a triple row of linden and birch trees, three hundred feet long, planted in the reign of the empreſs Anne. This alley is bounded on the left by the exerciſe room, an immenſe edifice of an oblong ſquare, which is never warm during winter, although furniſhed with twenty-four huge ſtoves. On the right the walk is bordered by the ſtable walls: it is terminated by two pavilions intended for the lodgings of the officers of the Imperial houſehold.

A drawbridge leads over a canal thirty feet wide, faced with free ſtone, to the grand area before the palace, which is three hundred and thirty feet long, and ſixty feet wide. In the middle ſtands a coloſſal equeſtrian ſtatue in bronze of Peter the Great, upon a marble pedeſtal, raiſed upon four ſteps. The horſe ſeems in motion; the rider is dreſſed in a Roman habit, and crowned with a laurel wreath. An Italian of the name of Martelli caſt this ſtatue in the year 1744, in the reign of Eliſabeth; and it had lain forgotten under a ſhed ever ſince. The eſteem the great grandſon entertained for his anceſtor drew it out of its obſcurity. On the pedeſtal is the following inſcription:

PRODAEDU PRAVNUCH *.

On the right and left ſides of this pedeſtal are two baſs-reliefs in bronze,

* The great grandſon to his great grandfather.

repreſenting the battle of Pultava, and the taking of Schluſſelburg.

We now come to the front of the palace. Each ſide of this edifice meaſures two hundred and ninety-four feet, independent of the ſalient angles. The building is ſurrounded on all ſides by canals, which are ſupplied by the Fontanka: they are ornamented with quays of granite, over which are thrown five drawbridges. The foundations of the palace are nine feet deep, and compoſed of large piles driven cloſe to each other, and caſed with ſtrong pieces of timber.

The ſubterraneous part, and the firſt ſtory, are built with blocks of granite, and the two other ſtories with brick, incruſted in part with marble. The reſt is covered with a reddiſh ſtucco, which colour tradition aſcribes to a trait of chivalrous gallantry. A lady of the court having one day appeared in gloves of that hue, it is poſitively ſaid that the emperor ſent one of them as a pattern to the plaiſterer. It muſt be confeſſed, however, that ſuch a colour ſuited a pair of gloves much better than the walls of a palace. Many of the inhabitants of Peterſburg ſeized that opportunity of flattering the emperor, and daubed their houſes with this colour. Madame Chevalier carried this ſpecies of flattery ſtill further; ſhe made choice of the colour for the part of Iphigenia.

The reader may form ſome idea of the impreſſion with which a ſtranger muſt be ſtruck on approaching this edifice. It is a monſtrous maſs of red ſtone, environed with ditches and drawbridges, and encumbered with twenty pieces of large braſs cannon, many of the various ornaments of which are directly contrary to the common rules of art. The two large obeliſks of grey marble, for inſtance, at the entrance of the principal front, reach to the top of the edifice and ſupport the emperor's cypher in bronze, with trophies of white marble; and near them are the two ſtatues, Diana and the Belvedere Apollo, which being placed in ſmall niches, produce a mean effect, merely on account of their ſituation: above theſe is a colonade of the doric order, ſuſtaining a ruſtic portal; a frontiſpiece of Parian marble, the work of the two Stagis, likewiſe catches the eye, preſenting Hiſtory under the figure of Fame, as ſhe appears on Trajan's column: on the attic two goddeſſes of glory ſupport the Imperial arms, and on the roof, which is over-laid with green varniſh, appear ſtruggling groups of ſtatues, repreſenting Cybeles crowned with towers and bearing on their ſhields the arms of the Ruſſian provinces. Upon the frieze, which is compoſed of porphyry of the country, we read the following words:

DOMU TVOJEMU PODOVAJET SVATUNA GOSPODNA V'DOLGOTU DNEI *.

And laſtly, above the gate, upon a ground of black marble, we behold this inſcription;

VOSKRESENSKIJA †.

Such is the groteſque aſſemblage of objects which excites the ſtranger's ſurpriſe, each of which, if taken ſeparately, would diſplay many beauties; but which, grouped as they are, produce an effect diſguſting to true taſte. The architect, whoſe name is Brenna, aſcribes the whole compoſition to the emperor himſelf, who, according to his account, even ſketched the deſigns; but ſome people doubt this aſſertion.

The church ſtarts out in the form of an oval from the ſecond front. It is incruſted with gray Siberian marble, and decorated with baſs-reliefs, repreſenting the four Evangeliſts, with a cornice of cherubs, together with two ſtatues ſtanding in niches, the one of Religion, and the other of Faith. On the attic are two ſtatues of St. Peter and St. Paul on each ſide of a

* Holineſs becometh thine houſe for ever. Pſalm xciii, verſe 5.
† The Sabbath gate.

croſs. A gilt tower finiſhes the dome of the church; the cupola is hung with four chandeliers, which, as well as the dome itſelf, and the croſs, are of gilded bronze.

Over a door, not far from the church, we read this word, inſcribed on a black marble ground:

ROSCHESTWENSKIJA *.

I endeavoured in vain to diſcover the monarch's intention in the choice he had made of the two laſt inſcriptions. A man of high conſequence, however, adviſed me to leave them untranſlated in my deſcription.

The third front overlooks the ſummer-garden: a circular ſtair-caſe, containing twenty-ſix ſteps of Serdopol granite, leads to a large hall, ſupported by ten doric pillars of red marble. The floor is white; on each ſide are two Egyptian ſtatues of bardiglio de Carrara, a hard ſtone, reſembling in colour a baſalt. The landing-place of the ſtair-caſe is graced on each ſide with ſix doric columns of red marble, over which riſes an attic, ſurrounded by a baluſtrade, which ſerves as a belvedere. To theſe ornaments are likewiſe added the ſtatues of Prudence and Strength, which ſtand in two niches. In the cupola of an adjacent pavilion, is the palace clock; and when the emperor is here, the Imperial flag is hoiſted on a ſmall tower, which forms a part of the pavilion.

Having thus ſurveyed the exterior of the palace, we ſhall enter it on the ſide of the grand front; and the Sabbath-door will lead us under a periſtyle, which forms an oblong ſquare. On each ſide the coach-way, which divides the periſtyle, riſes a colonade containing twenty-four doric pillars: each pillar is compoſed of a ſingle block of granite; the baſes and capitals of which are of Raſkol marble. In the midſt of the colonade are placed the copies of the Medicean and Borgheſian vaſes, in white marble, and on one ſide ſtand two coloſſal ſtatues in niches, the one, repreſenting Hercules with his club, and the other, Alexander the Great.

After having traverſed the periſtyle, we come to the interior area of the palace, an octagon of one hundred and ninety-eight feet diameter, and which lies ſix feet higher than the circumjacent level. The Imperial family and ambaſſadors are alone permitted to drive through this court.

It would be impoſſible to count how often the emperor's cypher is repeated within and without this edifice: in the interior court the piers of the windows and all the adjacent parts are filled with it. In this area, in eight niches, ſtand as many ſtatues of wretched workmanſhip; they are intended to repreſent Strength, Plenty, Victory, Glory, &c. but they are miſerably executed, and furniſh new proof of the diſguſting contraſt of the luxury and want of taſte which prevail through the whole palace.

Four large flights of ſteps, and two of leſs dimenſions, lead from the area to the inſide of the palace, and are terminated by large glaſs doors; but without paſſing through the court we enter on the left ſide of the periſtyle into an oval room, where thirty ſoldiers and one officer of the regiment of life-guards remain always upon duty. This party is continually relieved by another of the ſame regiment, while the reſt of the palace is guarded by ſoldiers of ſeveral different regiments. The ſpot where theſe thirty men mount guard has been very judiciouſly choſen; the hall they occupy extending on one ſide to the extremity of the periſtyle, and on the other to the ſtate ſtair-caſe; no one could approach the emperor without paſſing cloſe to the guard-houſe. The granite ſteps of this ſtair-caſe riſe between two balluſtrades of gray Siberian marble, intermixed with pilaſters of poliſhed bronze. The walls are incruſted with various kinds of marble, and the compartments were intended to be painted in freſco. On the land-

* The gate of the Reſurrection.

ing place ſtood a fine copy in white marble of the Capitoline Cleopatra; on each ſide were ſeen the ſtatues of Prudence and Juſtice in niches. At the top of the ſtair-caſe two grenadiers ſtand always upon guard.

I have led the reader as far as the grand mahogany doors, the pannels of which are richly ornamented with ſhields and arms, and Gorgons' heads finely worked in bronze. The door on the right opens into the ſtate apartments of the emperor.

From an oval anti-chamber, in which we behold with pleaſure the buſt of Guſtavus Adolphus, and with pity an allegorical ceiling painted by a Ruſſian dauber of the name of Smuglevitſch, we paſs into a ſpacious room plaiſtered with ſpotted yellow ſtucco. For the ſake of brevity, I ſhall mention only the principal ornaments of each chamber. In this room were ſix hiſtorical pictures, ſixteen feet in height and twelve in width. The ſubjects are as follows: The battle of Pultava, by Schebujeff, a fine compoſition, full of force and expreſſion, in which Peter the Great and general Schermetoff are the principal figures. The taking of Caſan, by the czar Ivan Vaſilevitſch, painted by Ogrumoff, a well-grouped piece. The coronation of Michael Fedorowitſch Romanow, grandfather to Peter the Great, a good picture, the work of Ogrumoff, who deſerves to be ranked among the beſt hiſtorical painters of his time. The Union of the Ruſſian and Turkiſh fleets, and their common paſſage through the Dardanelles, by Pretſchetnikoff, an indifferent repreſentation of a memorable event, though not deficient in aerial perſpective. The Victory of prince Demetrius Ivanovitſch Donſky over the Tartars of the don in the plains of Rulikoff, and The Baptiſm of the great duke of Vladimir, painted by an Engliſhman of the name of Atkinſon, whoſe pencil has a bold and ſtriking effect, though he is far from being faultleſs with regard to his outlines *.

I ſhall now introduce the reader into the throne-chamber, which is ſeventy feet long and thirty wide. It was perfectly well fitted up, and the ſight of it created reſpect and confidence. I ſhall not ſpeak of the hangings of green velvet embroidered with gold, nor of the magnificent furniture, nor the coloſſal ſtove, twenty-ſix feet in height, and almoſt covered with bronze. The throne was covered with red velvet richly worked in gold. On the back were diſplayed the arms of Ruſſia, ſurrounded with thoſe of the kingdoms of Kaſan and Aſtrakhan, of Siberia and Great Ruſſia. In various niches, directly oppoſite to the throne, and over the doors, were filled with antique buſts of Julius Ceſar, Antoninus Pius, Lucius Verus, and others. Above theſe appeared coloſſal ſtatues of Juſtice, Peace, Victory, and glory; and round the chambers were diſplayed the arms of all the provinces ſubject to the Ruſſian ſceptre, ſeventy-ſix in number, emblematically repreſenting the different inhabitants of this vaſt empire. It muſt be confeſſed, that theſe decorations, which were invented by the monarch himſelf, could not have been better choſen, and they manifeſted, whatever the world may chooſe to ſay, the noble and chivalrous ſpirit that animated his breaſt.

Among the ſuperb furniture of this chamber, a looking-glaſs, the largeſt in the palace, is worthy of notice. It is of one ſingle plate, nearly twelve feet in height and ſeven wide. There are likewiſe three magnificent tables worthy the admiration of the curious, one of *verde antico*, and the others of oriental green porphyry. Each of theſe is upward of ſix feet long and two feet wide; they are ſupported by braſs and bronze columns four feet high. A vaſt ſconce of bronze hung from the ceiling, which is decorated with two allegorical paintings, very

* The emperor's funeral decorations have ſince been erected in this room.

indifferently executed, by Vareliani. The banner of the order of Malta was introduced into both theſe pictures.

From the throne-chamber we paſs into the Arabeſque gallery, through a door placed between two beautiful doric pillars of oriental porphyry, which were purchaſed at Rome. On the cornice ſtood the buſts of Marcus Aurelius, with ſeveral large vaſes of red Siberian porphyry. Five niches were filled with as many ſtatues, copied in Italy from antiques, and repreſenting the Venus de Medici, Antinous Germanicus, the Apollo of Florence, and the Venus Callipygia. The architecture of this gallery is in the ſtyle of the famous chamber of Raphael at the Vatican, and like that wholly ornamented with arabeſques in different colours, by Pietro Scoti, the figures were painted by Vighi; the work, however, remains unfiniſhed.

From this room we paſs through a large glaſs door into the Laocoon gallery, ſo called from the celebrated group of that name, copied at Rome from the original, compoſed of one ſingle block of marble without ſpot or vein, and tranſported to Peterſburg without the leaſt accident.

The walls are decorated with four ſuperb Gobelins hangings, twelve feet ſquare, repreſenting St. Peter fiſhing —Jeſus driving the buyers and ſellers out of the temple—The Reſurrection of Lazarus, and Mary Magdalene anointing the feet of our Saviour. Two groups taken from ancient fable form a ſtrange contraſt with the above ſcriptural ſubjects: theſe are copies by Pacetti, from the celebrated Canova of Diana and Endymion, and Cupid and Pſyche. At one glance the eye catches the figure of Jeſus Chriſt and that of the perpetual ſleeper.

Over the doors are two pictures by Dallera of Rome, in wax colours; the ſubjects are Ulyſſes finding Penelope, and Hector taking leave of Andromache. They are already damaged by the dampneſs of their poſition; the latter is almoſt cracked in two.

I ſhall not ſpeak of the valuable tables of *breccia* and oriental alabaſter, the chairs of velvet, the various bronzes, all executed at Paris, &c. I ſhall only mention ſome of the innumerable clocks that were to be ſeen all over the palace. In this room there was one, in which the four Seaſons were repreſented in bronze in a car drawn by lions, and conducted by one of the Genii. The wheel ſerved as a dial-plate. The obſerver, by looking upward, would ſoon diſſipate all the effect this curious piece of mechaniſm might have produced on his mind, by the ſight of pictures which diſfigure the ceiling; that in the middle, repreſenting the Choice of Hercules, is the leaſt objectionable of the three; on the right is Courage accompanied by Merit, on the left, Juſtice and Peace embracing each other; theſe are all painted by Smuglevitſch, an abortive ſon of the Muſes and Graces. It muſt be obſerved, however, that the emperor himſelf had furniſhed the ſubjects of this ceiling; he it was who aſſociated juſtice and peace, courage and merit together. It had been well had he committed the execution of theſe deſigns to a more able hand. But ſuch was his general conduct. The ſource of his actions was always pure and benevolent, but the agents of his intentions were frequently corrupt.

Two life-guard ſubalterns ſtood centinel, with ſpontoons in their hands, at the entrance of an oval apartment, in which ſixteen Corinthian columns of ſtucco ſupported an attic, the ceiling of which reſted upon as many caryatides, executed by Albani. Five allegorical baſs-reliefs, that ſet all explanation at defiance, filled up the intervals. The furniture of this room was of flame-coloured velvet, worked on ſilver, which produced a fine effect.

The ceiling Painted by Vighi, and of a different deſcription from thoſe juſt mentioned, repreſents the Gods in Olympus. Jupiter ſeems to be abſorbed in a flood of glory, and the

whole compoſition beſpeaks the hand of a diſtinguiſhed artiſt.

Near this apartment is the Marble Hall, the guard-houſe of the knights of Malta, which meaſures ninety feet in length, thirty in breadth, and near forty-two in height. The architecture is compoſed of two different orders; the walls are divided, as high as the attic, into vaſt compartments, decorated with breccia corolina de Genova, and black Porto-Veneſe marble. The long and flat ſconces of poliſhed bronze, which are fixed at proper diſtances in the walls, produced a good effect upon the black ground. At one end of the wall is an orcheſtra of white marble, ſurrounded by a baluſtrade of poliſhed bronze, on which were ranged ten large vaſe chandeliers. The ceiling was naked, a Parnaſſus was then painting at Rome to cover it.

A large niche, formed and ſupported by two ſuperb Ionic columns of Siberian marble, divided the hall into two equal parts. A chimney-piece of white marble, ſuſtained by four termes, and incruſted with lapis lazuli and agate, is conſtructed in this niche. Two other chimnies are built on each ſide, in ſimilar niches, and afford fine ſpecimens of *giſolino antico*, a rare marble, reſembling green petrified wood. The niches were adorned with ſtatues, copied at Rome from the antique, repreſenting Bacchus, Mercury, Flora, and Venus. I paſs over the clocks, ſconces, vaſes, ſmall ſtatues, and all the curious ornaments in bronze, which contributed to the decoration of the apartment.

At one end of this hall is a grand niche formed by two large Ionic columns, and containing a door-way, through which we paſs into the circular throne-chamber.

Sixteen Atlaſes of coloſſal ſize ſuſtain the dome. The walls are hung with red velvet embroidered with gold, and decorated with gilt carvings. The windows are concealed by curtains of the ſame ſtuff except one, which is compoſed of a ſingle pane of glaſs, and framed in ſolid ſilver. The throne differs in no reſpect from that already deſcribed, except in the number of ſteps, the former being compoſed of eight, and this of only three. One ſconce of nine, and eight others of ſeven feet in height, ornamented this apartment; they were all of maſſy ſilver, highly poliſhed, worked in one piece, and were purchaſed at the manufactory of the ingenious M. Buch, counſellor of ſtate in the kingdom of Denmark. The ceiling, which is painted in *camæin* and gold, intermixed with arabeſques, was executed by Carlo Scoti.

Some time before his death, the emperor had ordered ſeveral alterations to be made in this room. The red velvet hangings were to have been ſtripped off, to give place to others of yellow velvet, finely embroidered in ſilver. In the corners were to have been placed large roſes of maſſy ſilver, with medallions and wreaths of laurel of the ſame metal. The two tables, the ſtands, the clocks, &c. were likewiſe to have been of ſilver, and the court goldſmiths had already been furniſhed with fourteen hundred pounds weight of that metal for this purpoſe.

From this room a door opens into the inner apartments of the empreſs. The firſt chamber was hung with tapeſtry of ſky-blue ground, upon which were repreſented various views of the Caſtle of Pavloſky. At the bottom of the room is a niche ſuſtained by two ſuperb doric columns of porphyry, before which is placed the group of Apollo and Daphne, copied in Carrara marble from Bernini. Vaſes, clocks, tables of porphyry, agate, oriental alabaſter, *roſſo antico*, and bronze, were ornamentally ſcattered over the chamber. Paintings in wax-colours by Dallera adorned the door-tops; and the ceiling, as well as moſt of the others in the palace, was painted in freſco by Cadenacci.

Two doors formed of mahogany, roſe-wood, and cedar, emboſſed with gilt carvings, and encruſted with white

marble, lapis lazuli, and malachite, lead us into a cabinet as much overcharged with ornaments as the doors themſelves, and with which the eye quickly grows diſtracted and fatigued. The walls are of grey Siberian marble, with compartments of lapis-lazuli, &c. and a wainſcot of *giallo* and *nero antico*; the cornice lapis lazuli with lions heads in bronze; the cornice is topped with baſs-reliefs raiſed upon a poliſhed golden ground. The divans or ſofas, the ſtools, and the curtains were cloth of gold: a niche was formed by two Corinthian columns of fine oriental alabaſter of entire pieces; the pedeſtals encruſted with *verde antico* and lapis lazuli; there was likewiſe a group in white marble, repreſenting Caſtor and Pollux, the work of Albagini; and in two ſmall niches the Tragic and the Comic Muſes. The chimney-piece was of *verde antico*, malachite, and bronze; beſide theſe were tables, vaſes, and ſmall ſtatues in agate, bronze, &c. together with a quantity of fine china painted with arabeſques in the manner of Raphael. All theſe and many other articles which I have not named, were crowded into a cloſet of twelve feet ſquare.

The cloſet opens into the ſtate bedroom, which is more plainly, and therefore more agreeably furniſhed. This chamber is very ſpacious. The walls are of ſtucco, covered with feſtoons painted upon a poliſhed gold ground.

The bed, which is richly carved and gilt, is ſurrounded by baluſtrade of maſſy ſilver of four hundred and ninety pounds weight. Over the bed is a ſky-blue velvet canopy, ſuſpended by ſix ſilver ſtrings. The cornice is ſupported by Corinthian columns, and painted in arabeſque, upon a poliſhed gold ground. The interſtices of the columns are furniſhed with divans of blue velvet, and vaſt looking-glaſſes, compoſed of ſingle plates. The chimney is of white Carrara marble, with a cornice ornamented with lapis lazuli, and florentine moſaic work of amethyſt and other fine ſtones, repreſenting various kinds of fruit in the moſt natural manner. An allegorical ceiling, indifferently painted by Valerini, ſeemed to be very difficult to unravel.

The chamber next to the ſtate bedroom was fitted up in a plain ſtyle, and has ſerved at one time for an eating, and at another for a concert-room. Beſide two chimney pieces and ſome porphyry vaſes, the room affords nothing remarkable. It intereſted me however exceedingly, as it was the play-room of the young grand dukes. I have many times found them here; they are two lively ſpirited princes, and extremely affable and polite to all ranks of people. The tenderneſs of the empreſs mother, whoſe ſoul is wrapped up in her children, had provided againſt accidents by having cauſed pillows to be piled againſt the glaſs doors which open upon the balcony, to the height of four feet.

Leaving this apartment on the left, and the common apartments of the empreſs on the right, we paſs through a room of no grand appearance into her majeſty's throne-chamber. The throne itſelf reſembles that of the emperor, except that it is leſs, and only ſtands on a ſingle ſtep. A grand niche ſuſtained by two coloſſal caryatides, contains a fine chimney-piece of white marble, repreſenting the nine Muſes. The ſplendour of the furniture may be compared with that of the other chambers. I ſhall only mention a beautiful clock, repreſenting Phœbus in his car drawn by two horſes, and performing his diurnal courſe. The dial-plate is fixed in the wheel of the car, the whole is highly finiſhed, and exhibits a maſter-piece of art. The ceiling, painted by Mettenleiter, repreſents the Judgment of Paris, and is not ill done. Of the ſame deſcription are the pictures of Beſſonoff, a ſcholar of the Academy of Arts at Peterſburg, which are placed over the doors, and repreſent Painting, Sculpture, and Architecture.

On one ſide of the throne-chamber

is the gallery of Raphael, ſo called from four magnificent pieces of tapeſtry, which almoſt cover a wall of ſeventy-two feet in length. Theſe are copies of four well-known pictures by Raphael in the Vatican. Conſtantine haranguing his troops on the day he gave battle to Maxentius. Heliodorus driven out of the temple, the famous School of Athens, and the no leſs famous Parnaſſus, in which Apollo plays on a modern violin. A large ceiling-piece, and two ſmall ones, painted by Mettenleiter, deſerve attention; that in the middle repreſents the temple of Minerva, upon the ſteps of which the liberal arts are grouped; the Greek that repreſents architecture is a portrait of Brenna; and Mettenleiter has depicted himſelf in the allegorical figure that perſonates painting. The ſubjects of the two ſmall ceilings are Prometheus animating man, and Idleneſs and Induſtry. This gallery is adorned likewiſe with fine bronzes, marble chimney-pieces, &c.

The gallery leads to an oblong ſaloon, in which are a very fine antique ſtatue of Bacchus, and a modern ſtatue, perhaps as fine, of Diana, executed by Houdon. The whole room is filled with buſts, baſs-reliefs, ſarcophagi, antique vaſes, &c. of very different degrees of merit.

This ſaloon lies contiguous to the guard-hall, where a detachment of horſe always remained on duty. The room merely exhibits four Ionic columns, and a ceiling-piece by Smuglevitſch, in which Curtius leaps into the gulf in a very awkward manner.

We are now upon the grand ſtaircaſe again, after having gone through the ſtate chambers of the emperor and empreſs, to the right and to the left. On the 8th of November, 1800, his Imperial majeſty celebrated the inauguration of the palace with the greateſt pomp. He dined for the firſt time in this edifice, and gave a grand maſked ball to the public, during which all the apartments which I have deſcribed were thrown open, and lighted up with ſeveral thouſand wax candles.

[To be concluded in our next.]

MEMOIRS *of the* PROGRESS *of* PHYSICAL SCIENCE, *and of the* USEFUL ARTS.

[TO the honour of the preſent age, theſe Sciences and Arts are now cultivated throughout Europe, and even in the other parts of the world, with an aſſiduity and ſucceſs unequalled at any former era. Upon this conſideration, and in compliance with that, which is the moſt laudable in the prevailing humour of public curioſity, we commence theſe Memoirs; which ſhall be continued, from time to time, more or leſs frequently, as the career of invention and diſcovery ſhall advance, and as the taſte of our readers ſhall be found to demand.]

CHEMISTRY and ELECTRICITY have, conjunctly, received, chiefly within theſe laſt eighteen months, the advantage of one of the greateſt diſcoveries which has been lately made in ſcience. It was, more than fifty years ſince, clearly diſcovered, after many previous imperfect approaches to the ſame diſcovery, that there exiſts, in the atmoſphere, at the ſurface of the earth, and pervading moſt material bodies, a peculiar fluid; the action of which may be, in ſome matters, excited by friction, while it enters and paſſes through others without mechanical aid; which tends continually, like water and air, to maintain itſelf *in equilibrio*; and which, by its efforts to reſtore itſelf to that equilibrium, produces moſt of thoſe changes upon other ſubſtances, from which its exiſtence is inferred. That fluid received, after the body in which its effects had been the moſt conſpicuouſly obſerved, the name of Electri-

city. In the proceſs of diſcovery, this Electricity was found to agree, in nature, with the lightning which iſſues in thunder-ſtorms from the clouds. The ſame train of reſearch was continued; and the accumulation of electricity in the torpedo, the influence of this fluid upon the growth of vegetables, its relations to the health of animals, and the power of the electric ſpark in many chymical combinations and decompoſitions, were gradually ſuſpected or aſcertained. Still, however, the electric powers of the animal nerve, and the poſſibility of accumulating electricity in thoſe bodies, which were conſidered merely as conductors, remained unknown. It was reſerved for the late Dr. Galvani, of Italy, to diſcover, that two pieces of two different metals, ſuch as zinc and ſilver, if in contact at two of their extremities, with each other, and at the other two, with the nerves of a living animal body, would communicate a ſort of ſenſation, and produce a muſcular contraction, ſomewhat as if there were a faint ſhock of electricity. Yet it was thought to be, not electricity, but a different, though perhaps analogous, fluid, which produced theſe effects. The ſuppoſed new fluid was called, after its inventor, the Galvanic: and the phenomena were farther inveſtigated. At length, Mr. Volta contrived to accumulate layers or ſtrata of the metals, with intermediate ſtrata of moiſtened paper, ſo as to educe from ſuch a pile alone, an energy which would decompoſe water, burn combuſtible matters, and oxidate metals with all the power and appearances of the electric ſpark. His experiments were repeated in England: and Mr. Nicholſon, Mr. Carliſle, Mr. Hyde Wollaſton, Mr. Davy, the ingenious gentleman of the Aſkeſian ſociety, and others, have aſcertained, that the fluid which had been called Galvaniſm, is entirely the ſame as electricity. Gold filings have been burnt with a vivid flame, by the ſpark called forth from the pile of Volta. It has been found, that this pile or battery may be variouſly compoſed;—with two metals, and a peculiar fluid moiſtening intermediate layers of paſteboard;—with a plate of metal, a piece of paſteboard containing a liquid, and a layer of charcoal, and theſe repeated to any magnitude; with ſucceſſive plates of one metal only, but with two fluids interpoſed with pieces of cloth, or bibulous paper between the plates; or with two plates of different metals, ſuch as zinc and ſilver, one over another, and over the ſecond, a piece of moiſtened cloth or paper. It has appeared, that the augmentation of the battery or pile in height, greatly augments its power to burn gold-leaf, iron-filings, &c. while the enlargement of the plates in diameter makes the ſhocks and the chymical changes attending them much more powerful, but without rendering the ſparks proportionately more energetic. The moſt remarkable changes which attend the ſhocks, and the eduction of the ſparks, are found to conſiſt in the oxidation or calcination of portions of the metallic plates, the decompoſition of parts of the liquids, and a ſimilar decompoſition of liquids, not within the pile, but connected with it by the intermedium of a wire, and ſo expoſed to the ſhock. The philoſophers of every country in Europe, are now earneſtly puſhing theſe diſcoveries further. Advantages the moſt important to medicine, and to others of our moſt valuable arts, are earneſtly expected to reſult from them.

The diſcovery of another new planet, is the moſt conſiderable thing that has been done, in the beginning of the nineteenth century, for the advancement of Aſtronomy.

Astronomy.—The univerſe, ſo far as it is, in its material parts, known to man, is underſtood to conſiſt of many ſeparate ſyſtems of ſpherical bodies, planets, comets, and ſuns; each ſyſtem having peculiar mutual relations of its own component orbs; and the whole having, probably, one grand order of combination, by which

all thoſe ſubordinate ſyſtems are united into one. There is a common principle of attraction or gravitation, by which, in its different modifications, the exiſtence of all thoſe orbs is preſerved, and all the changes which they undergo, are regulated. The different orbs, notwithſtanding their vaſt mutual diſtances, have, by their ſyſtematic combination, no inconſiderable influence to produce changes on the internal ſtate, one of another. Hence has it become of conſequence to the inhabitants of this earth, to count the numbers, and to obſerve the appearances and motions, not only of the other orbs in the ſyſtem to which itſelf immediately belongs, but of all the ſtars. We meaſure the ſucceſſion of time, and explain the phenomena of the tides, by the motions of the ſun and moon: we aſcertain the figure of the earth, and eſtimate diſtances on its ſurface, by means of the changing aſpects of thoſe, and the other heavenly bodies: ſo important do we find the knowledge of the truths of aſtronomy, to the practice of navigation, to the improvement of geography, and to the perfection of chronology; that we are led by the moſt intereſting conſiderations of utility, to ſtudy every changing appearance of every one of the heavenly bodies, to which our inſpection can, by any means, reach. The ancients of India, Greece, and Rome, had made that progreſs in the ſcience of aſtronomy which was the moſt eſſentially requiſite to the exact meaſurement of time. It was reſerved for the moderns, aided by the diſcovery of teleſcopic glaſſes, to aſcertain the true ſyſtem of the heavens, to deſcry the ſatellites of the planets revolving round our ſun, to trace the paths of the comets, and to add prodigiouſly to the numbers of thoſe ſtars, which had been before diſcerned and counted. The diligence of aſtronomers has been, during the laſt century, continually increaſed. New improvements in the powers of their teleſcopes have enabled them continually to enlarge the bourne of their diſcoveries. The inſtruments and the diſcoveries of Herſchel are well known. The Georgian planet, otherwiſe called *Uranus*, was firſt clearly deſcried by the keen inſpection with which he ſurveyed the heavens. It was ſtill ſuſpected, that, in the wide ſpace between Mars and Jupiter, might be the path of ſome planet as yet unobſerved. A ſociety of aſtronomers in Germany lately agreed to unite their endeavours to explore it. They were anticipated in the diſcovery by Mr. Joſeph Piazzi, director of the Royal Obſervatory at Palermo, in Sicily. On the 1ſt, the 2d, the 3d, the 4th, the 10th, and the 11th days of January 1801, he diſcovered a new ſtar, which he aſcertained to be a planet, having its orbit in the heavens between thoſe of Mars and Jupiter. On the 11th of February 1801, he again inſpected it. From that time, on account of its vicinity to the ſun, it was not again ſeen till the 7th of December. On that day, it was obſerved by Mr. Von Zach, from the Ducal Obſervatory, at Saxe Gotha. It was ſeen January 5, 1802, by Dr. Olbers, at Bremen. On the 11th, it was again ſeen at Gotha, by Von Zach. On the 26th, it was obſerved by Mechain, at Paris. Dr. Maſkelyne, at Greenwich, viewed it on the 3d, the 4th, and the 12th of February. It was alſo ſeen on the 7th of February, and ſome days ſubſequent by Dr. Herſchel at Slough, and by Alexander Aubert, eſq. at Highbury-houſe. It has been named by Piazzi, its diſcoverer, CERES Ferdinandea; Mr. Von Zach wiſhes to give it the appellation of HERA. It is ſmall; being, in diameter, only between a $\frac{1}{3}$ and $\frac{1}{4}$ths of the diameter of our moon. The time of its revolution round the ſun is calculated at 1681 days, or four years and ſeven months. It is ſuſpected to have two ſatellites.

The USEFUL ARTS are either chymical or mechanical, or arts in which theſe two characters are equally combined.

None of the chymical arts has been lately more improved than that of BLEACHING. The deſign of bleaching is, chiefly, to remove from linen and cotton yarn or cloth, a reſinous ſubſtance, which is naturally inherent in the flax, hemp, or cotton-wool, and of conſequence, alſo, in the threads and cloths into which theſe materials may be manufactured. This is effected, in ſome ſlight degree, by a friction of the yarn or cloth, which tends to leſſen the adheſion of the reſin to the thread, but much more by the application of ſubſtances of which the chymical action diſſolves the reſin, in order to carry it away into new combinations. Until within theſe few years, waſhing in water, boiling in water, ſteeping in a lye conſiſting of potaſh or ſoda, diſſolved in water, and more or leſs pure, expoſure in a moiſt ſtate to the action of the ſun and air, ſteeping in lime-water, or ſteeping in diluted ſulphuric acid, were the only means for bleaching commonly employed in Europe.—In the progreſs of chymical diſcovery in France, Mr. Berthollet found, about twelve years ſince, that the new acid known by the name of *Oxygenated Muriatic* Acid, was capable of effecting the entire diſſolution of the reſin naturally diſcolouring flax, hemp, and cotton, with a rapidity of which there was before no example. The diſcovery was even then proſecuted to a certain length, in France. But Britain was to have the honour of firſt reducing it into advantageous practice, on a great ſcale, in manufactures. The acid was combined with potaſh; and this combination in ſolution was employed with the happieſt effects, and with an extraordinary diminution of expence, as a lixivium or lye to whiten the uſual ſubjects of bleaching. To render the expence ſtill ſmaller, Oxy-muriate of lime was, by Mr. Tennant of Glaſgow, ſubſtituted, after ſome time, for oxy-muriate of potaſh. It proved not leſs uſeful. Mr. Higgins, of Dublin, found that ſulphuret of lime, or a mixture of ſulphur and lime, might be advantageouſly applied for the ſame end, alternately with the other ſubſtances already uſed in the new method. At Mancheſter, at Glaſgow, at Belfaſt, at Perth, at all the great manufactures, indeed, in Great Britain and Ireland, the mode of bleaching with theſe ſubſtances has been more or leſs entirely adopted. It reduces the term of bleaching from between two and three months, to between two and three weeks. And it leſſens the expence in at leaſt an equal proportion. The cloths or yarn are alternately in this method ſteeped in the lixivia, and expoſed to the action of the ſun and air, till they are, between the two, completely whitened.—Another method very conveniently applicable to the purpoſes of common waſhing, has been more recently diſcovered by Mr. Chaptal. This conſiſts in expoſing the cloth or yarn, which is to be whitened, to the action of the *ſteam* of a lixivium of *ſoda*. The ſoda in ſteam operates more powerfully than in any other mode in which it can be applied, to whiten, without deſtroying, the ſubſtance expoſed to it. Chaptal's proceſs has been already imitated with ſucceſs in Britain. It is the lateſt improvement which has been made in the art of bleaching.

In the Mechanical Arts, we know of no recent improvement ſo highly important, as that which conſiſts in the general adoption of the IRON-RAIL-WAY, at thoſe paſſages in the courſe of canals, where there is a ſudden elevation of level, ſuch as forbids the uninterrupted continuation of the canal by locks. The Iron-Rail-Way ſo diminiſhes the reſiſtance to the movement of weight on the ſurface which it covers, that a horſe is enabled to draw almoſt as great a weight along it, as that horſe could draw if the weight were in a boat moving in water.

COMPLAINT OF AN EARTHWORM.

To the Editor of the Univerſal Magazine.

Sir,

I KNOW not well how to addreſs you.—So improbable muſt it ſeem for one of my ſpecies to become, in any circumſtances, the correſpondent of a periodical Miſcellany, that I cannot but dread leſt the tale of my diſtreſs ſhould, to you and your readers, ſeem but a clumſy forgery.

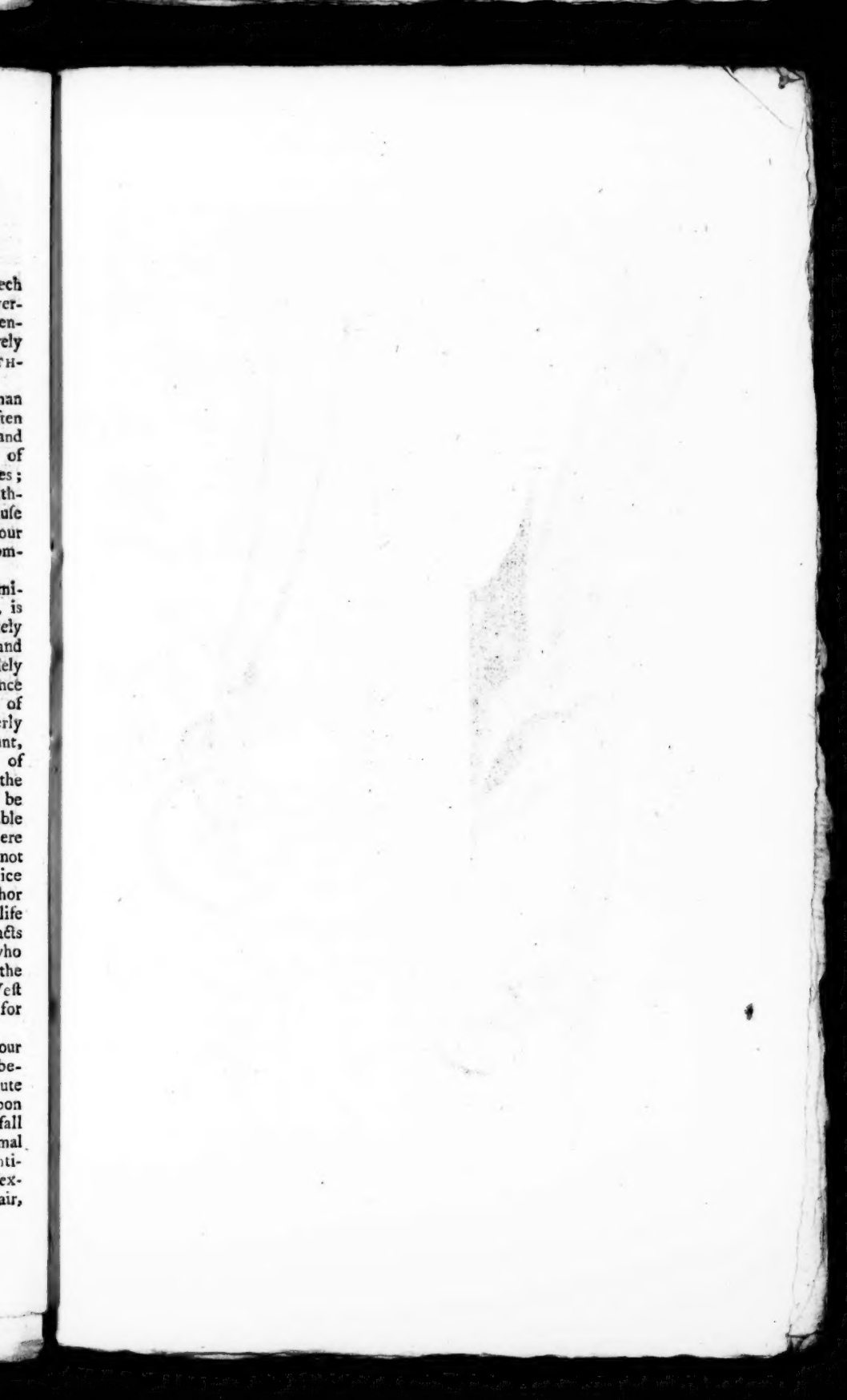
And, indeed, if it were not for the new intelligence which I find to be awakened within me, by my own diſtreſs, and by that of my ſpecies, I do not pretend to affirm, that I ſhould ever have been able to give expreſſion to my feelings in human language. But an aſs has been known to ſpeak, that it might ſave its maſter's life from imminent danger. A dog, prompted by affection for his maſter, has found modes of expreſſion ſcarce leſs forcible than articulate ſpeech. Filial tenderneſs has burſt the bands which fettered the tongue of the dumb. And a woman who had loſt the uſe of her voice, has been known to find it again, when there occurred a very urgent and ſudden occaſion for her raiſing it to ſcold her huſband. You cannot be a ſtranger to the fame of the learned pig. And you muſt no doubt have heard of the parrot that imitated the whims, the humours, and the froward ingenuity, ſtill better than the ſpeech and the ſong of its lady. You, indeed, believe thoſe memoirs of the manners and converſation of brutes to be merely fables, which are preſerved by the Grecian Eſop and the Indian Lokman. But the poets and philoſophers of antiquity knew better. The moſt popular of Engliſh poets has told you, that 'the poor beetle which you tread upon feels the ſame pain as when a giant dies.' And he might with great truth have added, that the intelligence of the giant has been at leaſt ſometimes as little ſuperior as his ſenſibility to that of the beetle.

Do not then, ſir, do not, I beſeech you, ſhrink from my tale with averſion or incredulity, now, when I venture to inform you, that it is merely the humble complaint of an EARTHWORM!

To be trampled under foot by man and beaſt; to be cut in pieces as often as we fall in the way of the ſpade and the ploughſhare; to be the prey of birds, and the favourite bait for fiſhes; is a fate we have long ſuffered without complaint; and of which, becauſe it ſeems the natural deſtination of our ſpecies, I ſhall not even now complain.

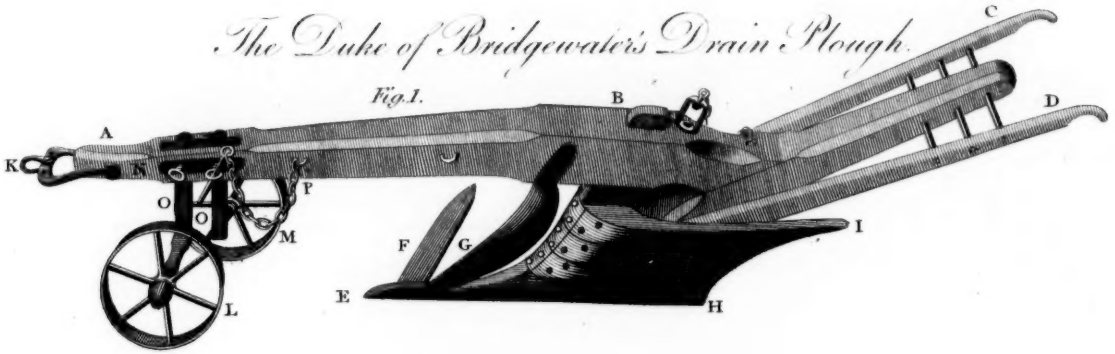
What makes us juſt now more miſerable than at any former time, is the knowledge of an opinion lately propagated among you, that we, and the ſpecies a-kin to ours, are ſolely nuiſances on the earth, whoſe preſence and endeavours can never prove of the ſmalleſt uſe to man. An utterly exterminating war is, on this account, declared againſt us; and birds, of whoſe injuries you have otherwiſe the greateſt reaſon to complain, are to be ſuffered merely for their implacable hoſtility to us and our brethren. There are few from whom we ſhould not have ſooner expected ſuch a device againſt us, than from its real author Dr. Lettſom, a gentleman whoſe life has been diſtinguiſhed by ſo many acts of humanity. But ſo it is; he who could ſo generouſly compaſſionate the ſlavery of the negroes in the Weſt Indies, has no conſideration at all for us poor earthworms.

But the truth is, ſir, that even our puny ſervices are of the greateſt benefit to man. We, and other minute reptiles and inſects, by preying upon vegetables which would otherwiſe fall into putrefaction, as well as on animal ſubſtances, of which we equally anticipitate the putridity, prevent that exceſſive contamination of the air,



The Duke of Bridgewater's Drain Plough.

Fig.1.



Mr. T. A. Knight's Drill Machine.

Fig.2.

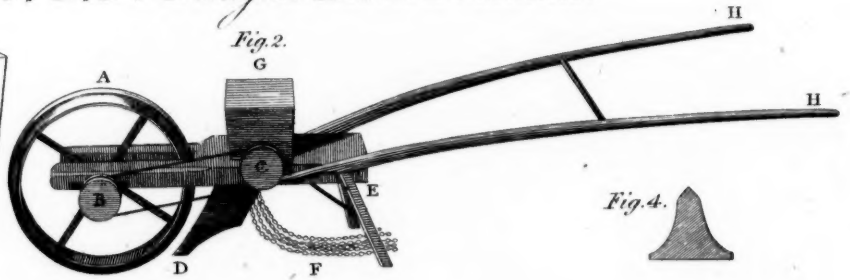


Fig.3.

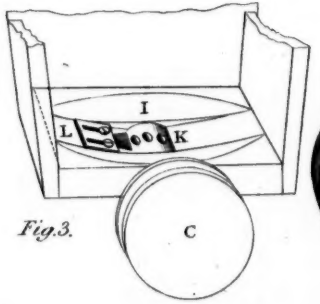


Fig.4.

which but for us would never leave you without an epidemical fever. Our excrement, our eggs, our lifeleſs bodies, are depoſited in the ground, ſo as actually to contribute more than all your manures to its fertilization. Our conſtant ſtirring of the mould breaks and opens its ſmaller parts, better than you can with either the plough or the ſpade. Many of the fibrous roots of plants would not, but for our toil, be reduced to a ſtate in which they might manure, not cumber the ground. It is to the growth chiefly of things unfavourable to your huſbandry, that we ſmall reptiles and inſects are the moſt pernicious. And however melancholy the conſideration, it deſerves alſo to be ſtated, that if we were not to fall in the way of birds, they would devour ten times as much as they now do of your grain, and of the other ſeeds of plants. Beſides, were it not for us, how ſhould you be able to feed and fatten your hens, ducks, geeſe, and turkies? Only exterminate all worms and inſects from any one rood of ground; and before three years paſs away, you ſhall not fail to ſee that you have loſt much more than you have gained by that pains. We refuſe not to die in what is, to us, the courſe of nature, and for the real benefit of man. But we proteſt againſt being needleſsly exterminated.

AN EARTHWORM.

A Deſcription of the Duke of BRIDGEWATER'S DRAIN PLOUGH: *Illuſtrated by an Engraving.*

[From the Tranſactions of the Society of Arts, &c. Vol. XIX.]

A MODEL of this plough, made upon a ſcale of one inch to a foot, was preſented by the duke to the ſociety, and ſent with the following communication from his grace's agent, addreſſed to the ſecretary of the ſociety.

Sir,

I am favoured with yours of the 15th inſtant. The model of the Guttering-plough ſent you, was a preſent to the ſociety from his grace the duke of Bridgewater, made by Robert Tomlinſon, one of his grace's conſtant workmen.

I procured the following account this morning from the duke's farmer: —In clay or ſtiff land that lies flat, the plough cannot go too deep; but if it lies on a declivity, about five inches deep is ſufficient. In ſoft light ſoil, the plough ſhould go as deep as it can in all ſituations, becauſe the ſides moulder into the gutters. The beſt time of draining is about Michaelmas, or as ſoon as the graſs is eaten; and the whole ſhould be accompliſhed between that time and Chriſtmas.

In clay ground that has never been drained, ſix good horſes will be requiſite to draw the plough. In every following year the plough ſhould be run through the ſame gutters, and four horſes will then be ſufficient.

Worſley, I am, &c.

Sept. 18, 1800. THOMAS BURY.

P. S. The ſhare of the plough muſt be well ſteeled, and ſhould be ground ſharp.

*** At Broughton, in the neighbourhood of Mancheſter, conſiderable quantities of ſtiff clay, paſture, and meadow land, have been much improved, under the inſpection of the ſecretary of the ſociety, by the uſe of this plough.

After the cattle were houſed for the winter, three horſes were employed to form drains with the plough at proper intervals: the ſmall drains were made at the diſtance of about nine yards from each other, in old furrows of the ground, and about five inches deep: the ſod, when cut out by the plough, was of a wedge-like form, and turned out by it upon the ridges of the land, entirely ſeparated from the drain or gutter. Theſe ſods were afterward divided acroſs, by a ſpade, into lengths of about two feet each, then

toſſed by a pitch-fork into a cart, and placed in a heap in the field, along with ſtrata of quicklime in a powdery ſtate: the whole maſs was reduced to a compoſt by the froſt during the winter, and in the following ſpring was laid upon the ſurface of the land, and formed an excellent top-dreſſing.

The water from the ſmall drains was directed into larger drains, made by lowering the ſhare of the plough to the depth of nine or more inches. Little or no loſs of land aroſe from the ſmall drains, as natural graſſes were produced therein, early in the ſpring. It will be highly advantageous to repeat the operation every winter; it is eaſily and expeditiouſly performed; and no perſon, without an actual experiment of the fact, can form a ſufficient judgment of the great benefit ariſing to vegetation by the removal of cold ſtagnant water, during the winter, from land of every deſcription.

See the PLATE annexed, Fig. 1.

A B. The beam of the plough.
C D. The handles.
E. The ſhare or ſock.
F. The coulter, or firſt cutter of the ſod; which coulter is fixed to the ſhare.
G. The other coulter, or ſecond cutter, which ſeparates the ſod from the land, and directs it through the open ſpace between F and G. This coulter is connected with the ſhare and the beam.
H I. The ſheath of the plough.
K. The bridle or muzzle, to which the ſwingle-tree is to be fixed.
L M. Two wheels of caſt iron, which may be raiſed or lowered by ſcrews at N, preſſing upon the flat irons O O, to which the axis of each wheel is fixed. Theſe wheels regulate the depth which the ſhare is to penetrate into the earth.
P. A chain with an iron pin, to move the ſcrews at O.

A Deſcription of a DRILL MACHINE *for ſowing* Turnip-ſeed; *invented by* THOMAS ANDREW KNIGHT, *Eſq. Illuſtrated by an Engraving.*

[From the Same.]

THIS very ingenious and uſeful inſtrument poſſeſſes the powers of making an indent or furrow for the ſeed; of depoſiting the ſeed within that channel, and covering it inſtantaneouſly in a more effectual manner than can be done by the harrow or rake. Its conſtruction is ſimple and cheap; and it can be worked, on any ſoil, by a man or boy. A complete machine was preſented by Mr. Knight to the ſociety, accompanied with the following deſcription of its form and mode of application, addreſſed to the ſecretary.

Sir,

I have ſent you a ſmall inſtrument for ſowing turnips, which I have tried on ſeveral different ſoils, and think I can venture to aſſert, that it will ſow the ſeed and cover it perfectly well, in any ſoil that is nearly in a proper ſtate to receive it. It is neceſſary either to harrow the ground *acroſs*, or to roll it, previouſly to the inſtrument being uſed, that the labourer may ſee the rows he has made; but I have always found the crop to ſucceed better after the roller than after the harrow, though the ground has been very ſtrong.

The inſtrument is ſo extremely ſimple in its conſtruction, that it is almoſt unneceſſary to give a deſcription of its mode of action; but as parts of it may probably be broken in carriage, I have added the following ſketch:—See the plate, page 193, fig. 2. A, the iron wheel, which, running on its edge, formed by two concave ſides, makes the groove into which the ſeeds fall. I have ſometimes uſed a wheel with ſtraight ſides; but I think that concave ſides, when well executed, are to be preferred in ſtrong ſoils, and indeed in any ſoil. B is a wheel moving on the ſame axis with A, and turning the wheel C (which

gives out the ſeed) by means of a ſtrap. I have ſeveral ſizes of the wheel B, in order to increaſe or diminiſh the rapidity of C; and conſequently to ſow more or leſs ſeed. D, the tube through which the ſeed paſſes, and falls into the channel made by the iron wheel. E, the feet of the inſtrument. F, ſix lengths of jack-chain; which I find cover the ſeed remarkably well. The chain is perhaps preferable to any kind of harrow, becauſe it can never become encumbered by looſe ſtraw, which is almoſt always found on or cloſe to the ſurface, when the ground has been manured; and the iron cutting-wheel has a ſimilar advantage over any kind of ſhare. G I, the ſeed-box. H H, the handles of the machine.

The labour of uſing the inſtrument is very ſmall. My workman uſually accompliſhes four ſtatute acres or ſomething more in a day: and laſt night, with the one I ſend, he ſowed an acre and a half after ſix in the evening. There are two holes before the axis of the great wheel, to receive two pieces of cane, which point out the proper width of the intervals between the rows. I uſually place my rows at eighteen or twenty inches diſtance; and I wiſh my plants to ſtand at not more than ſix inches apart in the row; for I find that three ſmall turnips weigh about as much as one large turnip, are more ſolid, and I think more nutritious, and certainly are much leſs apt to ſuffer by unfavourable weather. The ground between the rows is, of courſe, worked with the hoe. I am, &c.

THOMAS ANDREW KNIGHT.

Elton, near Ludlow.

N. B. The angle which forms the edge of the wheel A, muſt be made more or leſs acute; and the inſtrument more or leſs heavy, proportional to the ſtrength of the ſoil. I have ſometimes added weights of lead over the axis of the wheel, but it will rarely be found neceſſary. I have tried the inſtrument on different ſoils, and I think it will anſwer on any. A great advantage may be derived by ſowing turnips with it, at a time when horſes, now commonly uſed for the ſame purpoſe, are engaged in other employments. A few days are frequently of importance in ſowing turnips, which by fortunate rains have got a wonderful ſtart of thoſe which have been ſown a day or two later.

Fig. 3. is a ſection, on a larger ſcale, of the ſeed-box G, in fig. 2. The wheel, marked C, is alſo the ſame as in that figure: it is fixed upon the axis of the cylinder I, which is pierced upon the ſurface with holes at K, for the ſeed. This cylinder turns round within a groove at the bottom of the box, and is ſo well fitted therein, that no ſeed falls from the box but what is delivered by the holes K. A ſmall bruſh, marked L, rubs againſt the cylinder, to clear out any ſeeds which may remain in the holes.

The ſeeds fall into the tube underneath the cylinder, and thence into the channel, made by the indenting rim of the iron wheel.

The looſe chains which follow, cover the ſeeds with earth, as before mentioned.

Fig. 4. a front view of the wheel, exhibiting its edge.

The EXISTENCE *of a* GOD *proved from the* WORKS *of* NATURE.

To the Editor of the Univerſal Magazine.

Sir,

THE heavens, the earth, and its inhabitants, are the grandeſt ſubjects that can attract the attention of mankind. A contemplation of the ſun, the planets, the ſtars, and of that expanſive and beautiful canopy with which they are inveſted, fills the mind with an awful veneration for the Deity. Every celeſtial object which we view with the naked eye, or explore with

the teleſcope, teems with wonders. When we contemplate the ſun diſpenſing his favours, light and life, to the earth, to Mercury, Venus, Mars, Jupiter, Saturn, and Herſchel, bodies of aſtoniſhing magnitude, different in their ſizes, different in their diſtances from him, and all revolving round him in their reſpective orbits with an amazing velocity, we are filled with admiration; and the language of the heart is the language of the firſt pair when they pronounced, or ſung the praiſes of their Creator.

Theſe are thy glorious works, parent of good!
Almighty! thine this univerſal frame,
Thus wondrous fair, thyſelf how wondrous then! MILTON.

A contemplation of the earth, its animals, vegetables, minerals, and other productions, however neglected by ſome parts of the community, is certainly an entertaining diſport, and an uſeful ſtudy. The earth, this grand magazine of wealth, which ſupplies man, and every animal and vegetable with ſuſtenance, is now moving in its orbit round the ſun; and we, without the leaſt perception of this motion, are carried fifty-eight thouſand miles in an hour! A knowledge of the earth, of geography in particular, has ſerved to extend our commerce, to accumulate our greatneſs, and to civilize ſavage nations. Barbarians have received, and are now receiving, from Britons, the uſeful arts, and a religion and a morality which the philoſophers of Greece and Rome could never diſcover; a religion and a morality far ſuperior to theirs, or to any ſyſtems which the united efforts of genius and learning can form. The devil, in his firſt viſit to the earth, is repreſented by Milton as almoſt ſenſible of its beauty. The fiend confeſſed the beauty of Adam and Eve; and he has on a day, when he wiſhed to work a miſchief, the direſt perhaps that could befal the human race, teſtified a ſenſe of the beauty of this planet. He ſhowed the redeemer of man, from a mountain to which he had conducted or hurried him, all the kingdoms of the world, and their glory. The glory of theſe kingdoms is their mountains, their woods and groves and palaces, their ſeas and lakes and rivers, their verdant landſkips and animals, and ſaid, 'all theſe will I give thee, if thou wilt confeſs me thy ſovereign.' Should a painter, who deſpiſes the aids of magic, be enabled, by a divine aid, to take in at one view the compaſs of the globe, he would eagerly ſeize his pallet and his pencil, and finiſh the grandeſt picture that man ever beheld. The artiſt would be honoured by kings. His picture would be the ſublime and beautiful. The livelieſt pleaſure would be excited in the ſpectators, and every ſoul would be filled with a ſenſe of, and a reverence for, that almighty Being, who ſaid, 'let the waters of the heavens be gathered together into one place, and let the dry land appear; and it was ſo.'

The firſt of animated nature is man, ſuperior to every animal in point of beauty; endued with an immortal ſpirit; an image of God, and the lord of the univerſe. His beauty, his ſtrength and reaſon, his docility, and his capability for art and ſcience, elevate him above every terreſtrial creature. When we reflect upon his attributes, his mechaniſm, his dominion over all nature, and the immortality of his ſpirit, we are impreſſed as the divine author of the Night Thoughts was, when he contemplated the ſame ſubject,

——— How auguſt,
How complicate, how wonderful is man,
How paſſing wonder HE who made him ſuch!

The vegetable race offers to the contemplative mind a ſource of beauty, wonder, and devotion. The traveller that has cultivated this branch of ſcience, has frequently in the moſt arid or uligenous wild an inſtructive and an entertaining companion. If he anatomizes a few vegetables (for the philoſopher is not ſatisfied with a glance or a ſimple inſpection) he finds that they are richly furniſhed with a variety of veſſels,

with nerves and brain, and with the organs of generation; and concludes, though in this analyſis he ſees not the locomotive muſcles, nor the digeſtive organs, that they are in reality an inferior order of animals. On the generative organs of vegetables, Linné, an ingenious Swede, conſtructed a ſyſtem, by which his name is immortalized, and demonſtrated that there is a congreſs of theſe organs, in ſome inſtances a part carried from the one to the other; and that the ſeeds of a germ, correſponding with the eggs of an animal, are, by the influence of the maſculine pollen, ſucceſsfully impregnated, and ſimilar vegetables are produced. If the traveller examines in theſe wilds, or in his fields and gardens, every part of a flower, the corolla in particular, of ſome large, coloured and beautified vegetable; or the corolla of the humble viola tricolor, heart's eaſe or panſies, heightened by cultivation, he ſees very happily with a glaſs an inexpreſſible ſoftneſs and beauty, and exclaims, in rapture, that 'Solomon in all his glory was not arrayed like one of theſe.'

Here we muſt obſerve, pardon the digreſſion, that Solomon, an exalted perſonage, loaded with the government of an empire, engaged in a variety of purſuits, a wiſer man than Ethan, wiſer than Heman, and Calcal and Dardal; in ſhort, the wiſeſt of the Jews, the author of three thouſand proverbs, and a large collection of odes and ſongs, devoted ſome hours to the ſtudy of nature. He gave his countrymen a hiſtory of quadrupeds. We lament that his ſcientific labours have not come down to poſterity; and of birds, inſects, and fiſhes, and of vegetables, from the cedar of Lebanon to the hyſſop, a cryptogamous plant that grows upon the walls of Jeruſalem *. His merit in ſcience, if we may judge from the teſtimonies that are given us, muſt have been pre-eminent. Joſephus, a Jewiſh hiſtorian, who no doubt ſaw the natural hiſtory of Solomon, ſays that he deſcribed the objects of nature like a philoſopher, and demonſtrated an exquiſite knowledge of their properties. An eminent character of our own time, the preſident of a learned ſociety of naturaliſts, informs us in a tour of his (but we now quote from memory) that if he had not poſſeſſed a knowledge of the vegetable reign he could not, when on the ſummit of mount Cenes, have enjoyed one of the greateſt pleaſures that can ariſe from a travel in that country.

Shielded by theſe authorities from the ridicule of the ignorant, and from the ſcorn of the votaries of lower and groſſer pleaſures, we may venture to aſſert, if nature was ſtudied in our public and private ſeminaries, that neither the condition nor the mind of man could be deteriorated. A preceptor of ſome celebrity, in a treatiſe on Practical Education, has recommended, and inculcated with ſheer gravity, plans for the attainment of wit. We wiſh to obſerve, but with deference to this author, that wit, and the graces, to which an eminent nobleman of the laſt century was perhaps too partial, cannot be imparted; they are the gift of heaven. The man that has not, before he ſees the light of the ſun, been bleſſed with theſe, muſt for ever be without them. That facetiouſneſs which diſtinguiſhed Mark Antony, and recommended him to the higheſt and the loweſt of his fellow-citizens, could not, in the opinion of Cicero, be acquired by art (in eo facetiæ erunt, quæ nulla arte trudi poſſunt). And a modern, not a leſs competent judge than this ancient, is ſtill more deciſive. 'Could we,' ſays he, in a diſcourſe to the members of the royal academy, 'teach taſte or genius by rules, they would be no longer taſte and genius †.' We ſhould have been gratified, if this author had, in

* Dr. Haſſelquiſt, a famous Naturaliſt, obſerved a Moſs, the Bryum truncatulum, growing in great abundance upon the walls of Jeruſalem, and concluded that it was the Hyſſop of Scripture.

† Sir Joſhua Reynolds.

in the place of wit, and in the place of many puerilities which diſgrace his volume, recommended and inculcated plans for the attainment of natural hiſtory. Information of this kind muſt benefit the public. The ſtudy of nature is of the laſt importance; and ſhould, when certain peculiar exercitations, the ſtudy of wit, and the ſtudy of magic, take the lead, and exclude ſtudies of greater dignity and utility, be particularly cultivated. To ſubſtantiate this poſition, and to give force and importance to our ſubject, we ſhall introduce a paſſage from the writings of John-James Rouſſeau, the celebrated philoſopher of Geneva.

'The ſtudy of nature abates a taſte for frivolous amuſements, prevents the tumult of the paſſions, and provides the mind with a nouriſhment which is ſalutary, by filling it with an object moſt worthy of its contemplations.'

It would be labour, and this article would ſwell into volumes, were we to enumerate and expatiate upon every inſtance in which the hand of a Deity is conſpicuous; the minuteſt, as well as the largeſt objects; the mouſe and the elephant, the humming-bird and the oſtrich, the aphis and the libellula, the aculeate pink and the mammiform whale, proclaim that there is a God, who made and governs every part of nature's wide and wonderful domain.

I am, &c. B. D.

Aſhton Under Lyne,
March 11, 1802.

CRITICAL RULES OF NOVEL-WRITING.

To the Editor of the Univerſal Magazine.

SIR,

NO ſort of writing is at preſent more generally cultivated than the compoſition of novels; and I do not know, that there is any other which has ſo great an influence upon the common practice of life. It will not be denied, that the virtue, happineſs, and wiſdom of the men depend entirely on the fair ſex. From the age of fifteen to eighty-five, the men are preciſely what the women chooſe to make them. And of our ſpinſters and matrons, there is not one in fifty, whoſe condition allows her to have at all the inſtruction and amuſement of reading, that does not derive from novels her principles of conduct, her prevailing tone of paſſion, her favourite dreams of hope, the rules by which ſhe eſtimates the characters of others, and that turn of ſentiment and imagination by which ſhe is, in any particular condition, pleaſed, and in good ſpirits, or diſcontented and peeviſh. The gin-ſhop is in fact not more the reſource of one claſs of females, than are the circulating library, and the novel manufactory, of all the reſt.

Yet, ſir, this ſpecies of writing, ſo important in its influence on human life, and ſo abundantly ſupplied to the public by authors male and female, has never yet, ſo far as I know, had its laws aſcertained, or the rules for its happieſt execution preſcribed, by ſound and enlightened criticiſm. Will you excuſe me, ſir, for preſuming to trouble you with an attempt to ſpecify the juſt rules for the compoſition of a good novel—an attempt which, however in itſelf imperfect, may not be without its uſe, if it ſhall excite ſome abler critic to complete what I may have but lightly ſketched, and to ſet in its juſt light, that which I may be found to have miſrepreſented.

A novel is a narrative of any event, or any train of events, in the domeſtic and familiar life of a number of human beings, not greater than that their characters and fortunes may make full and diſtinct impreſſions upon the mind; the events, whether more or leſs numerous, being combined ſo as to compoſe one whole; the narrative aſſuming, as convenience ſhall demand, ſometimes the dramatic, and ſometimes the epiſtolary form, to en-

liven the plainneſs of ſimple narration; the tenor of the whole, avoiding truth of fact, but ſtrictly and delicately preſerving truth of nature; the principal intereſt of the piece centering in a few leading characters, and remaining in a varying uncertainty, of which the iſſue may not be clearly foreſeen till the narrative comes to its cloſe. Every compoſition in language which poſſeſſes theſe qualities, is a novel. A work of fiction wanting any of theſe qualities, is not a novel, but ſomething of a different character, whether more important or leſs ſo.

From this definition, it clearly appears, that the firſt thing in the writing of a novel, is to invent a ſuitable fable. Toward the invention of ſuch a fable, the noveliſt cannot do better than begin with conſidering what great moral truth he ſhould particularly wiſh to enforce and illuſtrate. Thus, the 'Zeleuco' of the late Dr. Moore ſhows, that a diſpoſition naturally ſelfiſh and tyrannical, having this evil bias confirmed by a bad education, and through life purſuing ſelfiſh gratification, without regard to the diſtinctions between right and wrong, as without concern for the joys or ſufferings of others, cannot fail of rendering its poſſeſſor internally miſerable, and continually more and more ſo, in every ſcene of life, and will very often bring him to end the career of his vices and crimes in a death at once ſhameful, terrible, and premature. 'Nature and Art,' a ſmall novel by Mrs. Inchbald, which, were it not deeply tinctured with the ſpirit of democracy, would deſerve every praiſe, is written to ſhow that virtue alone is true nobility; and that virtue, with ſtrength of mind, will give comparative happineſs in every condition, however externally wretched.

The 'Sorrows of Werter,' by Goethe, has for its object to evince, that even genius, virtue, piety, the kindeſt of diſpoſitions, and the happieſt elaſticity of fancy, muſt be quickly loſt to every uſeful purpoſe, if the deluſions of one paſſion, however amiable, be ſuffered to acquire habitually an unbounded power over the courſe of thought in the mind; if a ſenſibility, naturally irritable, ſhall be cheriſhed till it become a feveriſh diſeaſe; if the dreams of imagination ſhall be continually indulged, to the excluſion of all the common ſenſe of ſober ordinary life. It is advantageous to the noveliſt, to begin with ſpecifying to himſelf ſome grand moral principle, which his fiction may illuſtrate; becauſe this will inſenſibly lead him to a recollection of thoſe incidents and characters within the range of his reading or obſervation, which may be the moſt eaſily combined for the end which he has in view. This is, as it were, a ſecret to facilitate invention. Even with this advantage he will not invent happily, unleſs he have both ſeen much of human life, and read much in the writings of former noveliſts, of the epic and dramatic poets, of the authors of perſonal memoirs, and of the lighter and more amuſing hiſtorians. The invention of the fable of a novel, inſtead of being a taſk ſuch as may be well executed by a raw girl with little knowledge of books, and probably ſtill leſs of life, is one which the moſt mature, the moſt cultivated, and the happieſt genius might contemplate with deſpair.

The fable of a novel ſhould in its texture preſerve a juſt medium between exceſſive complexity and extreme ſimplicity. In a great multiplicity of events, the intereſt will be diſſipated. In an undue paucity of incidents, it will be impoſſible to create and maintain that anxious hope, fear, and curioſity in the reader, in the excitement of which the intereſt of ſuch a piece properly conſiſts. The 'New Eloiſa' of Rouſſeau; 'Nature and Art,' by Mrs. Inchbald; and many of thoſe novels in German, French, and Engliſh, which aim chiefly at the praiſe of ſentiment, are meagre in the fable, and comparatively barren of incidents. In moſt however of our novels of an inferior claſs, the inci-

dents are too numerous, and are added one to another, without due regard to natural probability, or to the fitteſt means for ſeizing and enchaining the attention of a reader.

The events compoſing the fable of a novel ought rather to conſiſt of one capital change of fortune, involving many ſubordinate incidents, than of a ſucceſſion of ſuch changes connected, it may be, into a ſort of whole, yet not ſo cloſely connected as that a diviſion and a ſucceſſion of intereſts ſhall not eaſily appear. Thus, the 'Simple Story' of Mrs. Inchbald ſubdivides into two ſeparate novels; giving, firſt, the hiſtory of the love and errors of the mother; then, the hiſtory of her daughter. Fielding's 'Amelia,' on the other hand, with the ſimpleſt unity of its principal event, comprehends a wonderful, yet not inconvenient variety of ſubordinate incidents, and is, in this reſpect, a fine model for the imitation of other novel-writers. Prevoſt's 'Dean' of Coleraine' preſents another example of a novel, in which unity of action is loſt in the purſuit of a train of ſucceſſive events. Entire unity of deſign, and juſt ſubordination of incidents, have been, by our later noveliſts, much neglected.

The events in a novel ſhould be neither ſuch as happen every day, and are quite familiar to the recollection of all intelligent perſons, nor yet ſuch as are not exemplified above once in an age, and then by a concurrence of events ſcarce within the bounds of credibility. Incidents too common and familiar, want power to intereſt. Events fantaſtic and ſupernatural are liable either to be rejected from our belief, at firſt ſight, as fictions in which there is no tolerable ſemblance of truth preſerved; or, on account of their diſtance from the accuſtomed realities of human fortune, to want all power of agitating our hopes and fears, or of touching our ſympathetic feelings. The novels of the late Mrs. Robinſon were filled with wild incredibilities. The 'St. Leon' of Mr. Godwin is, in the tenor of its incidents, though not at all ſo extravagantly abſurd, yet ſubject, in a conſiderable degree, to the ſame cenſure. Even in the much read volumes of Mrs. Radcliffe, the events are often ſuch as never have been, and never will be. Not that I would condemn all inſtances of the fiction of ghoſt-agents in a novel. The ancient creed of ſuperſtition, the native bias of the human fancy, the impoſſibility of demonſtration that the ſouls of the departed may not again appear, are ſufficient to juſtify the introduction of a ghoſt-agent in one or two pieces in an age. But, if you make ghoſts the burthen of every novel, the fiction becomes ſtale and incredible. There is nothing in the real experience of life which can give it probability. The attempt is vain, to render a fiction of ghoſt-agency probable, by admitting the reader as it were behind the ſcenes, and ſhowing how the whole was the reſult of phyſical cauſes, or of common human agency, by accident miſtaken. It very ſeldom happens in life, that the movements of a human being are, for any length of time, miſtaken, as if they were rather thoſe of a ghoſt. Nor are the inſtances frequent, in this philoſophical age, in which phyſical effects ſtrike the ſenſes, as if they were immediately produced by viſionary intelligent agents. Ghoſt-agency, whether it be to paſs off, even at the laſt, for real; or be, in the end, explained away; might ſucceed, for once or twice, in the hands of a Radcliffe, or a Weber. But, uſed as the common trick of every minor noveliſt, it has no better effect than the moſt common and ſtale juggler's artifice. Moſt of the novels produced by young writers with ſome vigour and livelineſs of fancy, but little knowledge of life and nature, are filled with events abſurdly incongruous and incredible. Two or three old people, and as many young ones, a love-affair, a few difficulties oppoſing the wiſhes of the young lovers, and in the end a happy wedding, and ſome goſſip ſtories make the whole ſeries

of incidents in that other ſet of novels, which are inſipid, becauſe they keep too much in the hacknied track of familiar life.

Another error in the management of the fable of a novel is when, under his principal event, the writer introduces too great a crowd of ſubordinate ones, and thoſe rather epiſodical, than neceſſary parts in the detail of the main deſign. Le Sage, Fielding, and Cervantes, abound in unſeaſonable epiſodes, the unſeaſonableneſs of which we eaſily pardon, on account of their beauty. But let no writer commit a fault, in the hope that it may perhaps be excuſed. Too great a multiplicity of ſubordinate incidents, huddled together in ſuch a piece, reſembles a mob of paſſengers in the ſtreet, preſſing round any of thoſe trivial objects which fix common curioſity. The due proportion of ſuch incidents, ſhown in juſt detail, is like the elegant groupe of moving figures in a cotillon, or a country-dance.

But I cannot, in conſcience, give you further trouble, at preſent. This letter is already too long; ſo I muſt find another occaſion to write to you of the characters, the locality, the morals, the manners, the paſſions, and the literary compoſition of a novel.

Hammerſmith, I am, &c.
March 5, 1802. BOSSU JUNIOR.

MEMOIRS *of his Grace the late* DUKE *of* BEDFORD.

The premature Death of the late Duke of Bedford, *has ſo greatly excited the public Concern and Regret, that we are induced, in the preſent Inſtance, to depart from our accuſtomed Plan, to pay an immediate Tribute to his Memory.*

HIS Grace was the repreſentative of one of the moſt illuſtrious families in the Britiſh empire. His anceſtors in the male line were eminent, almoſt as early as the Norman conqueſt, among the gentlemen of England. Henry the eighth enriched ſir John Ruſſel with noble eſtates, and raiſed him to the dignity of lord Ruſſel of Taveſtoke and Thornhaugh. He was, in the year 1548, created earl of Bedford, by Edward the ſixth. Francis, the third in the ſeries of the ſucceſſors to the earldom, was, in the houſe of peers, the leader of the oppoſition to the meaſures of the court, in the firſt ſeſſion of the long parliament, but died at a critical time, when it was thought his counſels might have averted the miſeries of the civil war. His ſon and ſucceſſor, William, was at firſt entangled, by his connexions, in the ſervice of the parliament; returned afterward to his duty to the king; put himſelf a ſecond time under the parliament's protection, but was ſtill in his heart, though the friend of liberty, yet averſe from the overthrow of the royal power. He ſurvived the troubles of the rebellion. His ſon added the fortunes of the family of Wriotheſly to thoſe of the houſe of Ruſſel, by marriage with lady Rachel, the heireſs of lord Southampton. That ſon was the good lord Ruſſel, who periſhed by an unjuſt ſentence in the end of the reign of Charles the ſecond. After the revolution, ducal honours were conferred upon the repreſentative of a houſe, whoſe wrongs had greatly contributed to excite the people of England to that noble vindication of their liberty. Till the beginning of the preſent reign, the dukes of Bedford continued to be attached to the whig intereſt excluſively. John, Duke of Bedford, however, joined that aſſociation of whigs and tories, who ſupported the adminiſtration of the earl of Bute; and who, except during three very ſhort intervals, have ever ſince predominated in the legiſlature, and directed the government. His ſon, the marquis of Taviſtock, was killed by a fall from his horſe in the year 1767.

Francis, the ſubject of the preſent

memoir, the eldeſt ſon of that marquis of Taviſtock, by Elizabeth, daughter of William earl of Albemarle, was born on the 11th of Auguſt 1765. In the year 1771 he ſucceeded, on the death of his grandfather, to the dukedom of Bedford. His mother had not long ſurvived the unfortunate death of her lord. He remained, therefore, with his brothers, lord John and lord William, under the tuition of his grandmother the ducheſs dowager.

His early education was, for ſome time, at Weſtminſter ſchool. By an accident in play at cricket he received a hurt, in conſequence of which he was affected with a rupture. He was, on this account, removed from that ſeminary, and educated in a private and domeſtic way, till he went to finiſh his ſtudies at the univerſity.

From the univerſity, he went to ſee thoſe countries on the continent, with which Britain has the moſt frequent intercourſe, and which are eſteemed to be the favourite ſeats of civility and refinement. After his return, he was to enter upon his duties in public and private life, as an Engliſh nobleman, the proprietor of one of the moſt opulent fortunes, and the chief repreſentative of one of the moſt eminent families in Europe.

One of the firſt things in his conduct, which engaged the favourable notice of the public, was the paternal affection and liberality with which he provided for the fortunes and eſtabliſhment of his two younger brothers. We know not what exact ſums of money or eſtates he beſtowed upon them; but we remember, that the fact was, at the time when it took place, very much the theme of public applauſe; and that the

> Vivet extento Proculeius ævo,
> Notus in fratres animi paterni

of Horace, was on that occaſion warmly quoted, in reference to the highly meritorious conduct of his grace.

The young heir to ſuch vaſt eſtates, and ſo great a ſum of ready money, was naturally liable to be ſurrounded, at his entrance into life, as the uncontrouled maſter of his own property, by numbers of thoſe perſons who ſtudy to pillage the rich and inexperienced at the gaming-table, on the turf, in political adventure, and by ſtealing into their hearts, as the humble amuſing companions of their looſer and more careleſs hours. His grace played, kept race-horſes, and denied himſelf none of the amuſements uſual for a man of rank and faſhion; but he became the ſlave or dupe of none of them. With rectitude and honour, he carried into every purſuit, whether of buſineſs or diverſion, in which he engaged, ſo much ſound common ſenſe, ſuch cool ſtrength and preſence of mind, with ſo much of the penetration of genius, that he was, in no inſtance, betrayed, either to debaſe his character, or to hurt his fortune. To plunder others by ſuperior ſkill in games of chance, or in thoſe things which are made the ſubjects of wagers, was infinitely beneath both the dignity of his condition, and the genuine nobility of his mind. But it was much, that he ſhould poſſeſs that defenſive power in ſuch matters, but for which, he muſt either have wholly avoided the accuſtomed courſe of faſhionable life, or muſt, elſe, have become, ſooner or later, a prey to the harpies that might have haunted his ſteps. This, from his earlieſt appearances in life, after he was of age, impreſſed the world with great reſpect for his manly ſenſe and diſcretion—a reſpect which was never abated by any part of his ſubſequent conduct.

He did not, impatiently, urge into the buſtle of political life. After he took his ſeat in the houſe of lords, he gave ſeveral years to the obſervation of the temper and the forms of the houſe, to an ingenuous modeſty that diſpoſed him rather to liſten to the ſuggeſtions of age and experience, than raiſe his own voice prematurely in debate, to the ſtudy of the Engliſh conſtitution in books, and in the converſe of his illuſtrious friends, above

all, to the due conſideration of what were the true political and parliamentary duties of a duke of Bedford. At laſt, he broke through the ſilence which he had for a while maintained, and aſtoniſhed their lordſhips with the diſplay of a power of eloquence, and a dexterity in debate, exceeding both the hopes of his friends, and the fears of his opponents.

He preferred to the politics of his grandfather, thoſe which had been for almoſt a century and a half the hereditary principles of the houſe of Ruſſel. His illuſtrious couſin, Charles Fox, was at the head of the whig party in oppoſition; and it was as the aſſociate of his principles and views, that the duke choſe to begin his political career. The whole whig intereſt was then united, and they ſtill maintained, as the baſis of their union, what had been firſt deciſively, and avowedly aſſumed as ſuch, in the reign of George the ſecond, and under the adminiſtration of the Pelhams; namely, that the whig nobility and gentlemen ought, when in union, to be abſolutely maſters of the legiſlature and government, otherwiſe the genuine ſtrength of the conſtitution was loſt. The new tories, attached to the power of the crown in the houſe of Hanover, as the old tories were in the houſe of Stewart, then prevailed in the legiſlature, and adminiſtered the powers of the government. On both ſides there were ſo many good and wiſe men, that a young nobleman might, without diſhonour, take his place on either. To take it on that on which he might ſhew the higheſt reſpect for the ancient political virtues of his family; on that on which he might the beſt evince the generous independence of his own ſpirit; and on that on which he might co-operate with the men who had the moſt of his perſonal affection and eſteem, was the choice of the duke, and a choice honourable alike to his underſtanding and to his heart.

A criſis ſoon aroſe, the circumſtances of which moved many of the whigs in oppoſition to rally round the throne, in dereliction of their wonted principles. They dreaded a popular revolution, in which the monarchy and the ariſtocracy might be overwhelmed together; and, in that fear, they only obeyed the voice of patriotiſm in making a common cauſe with the crown. They could ſee no feaſible means of averting the miſchief by the proſpect of which they were alarmed, other than in waging war with France. They accepted reſponſible offices in the adminiſtration, and war was declared. It concludes, after a ſeries of campaigns, in which, partly by the exertions of Britain, and partly by the natural tendency of revolutionary fury to exhauſt and ſubdue itſelf, the objects for which it was undertaken appear to have been, in a great meaſure, accompliſhed.

But his grace did not ſee the danger by revolution, in the ſame light in which it was viewed by thoſe of the whig party who entered the adminiſtration, to ſupport the war. With Mr. Fox, and others of his friends, he ſtill inclined to cheriſh a jealouſy of the crown, which had much more influence with him, than any fear of immediate danger from republicaniſm. He thought that a reform in the mode of parliamentary repreſentation, and a few other ſeaſonable changes in the principles of the government, would reſtore the Britiſh conſtitution to all its primitive vigour, and would more effectually, than any meaſures of authoritative coercion, prevent miſchief from the frenzy of popular innovation. He queſtioned the juſtice of a war, waged to prevent the ſpread of republican revolution, by impoſing, on a foreign nation, a government which they had themſelves already rejected. And he much doubted, whether the war might not, in the end, weaken the hands of the regal government of this country, ſo as to make it, hereafter, the eaſy prey of fraternizing republicaniſm, inſtead of endowing it with that energy, and ſurrounding it with thoſe bulwarks of defence which

were expected to it from the war, by thoſe upon whoſe counſels hoſtilities had been begun.

He continued during the war in oppoſition; but his oppoſition, ever manly, never factiouſly intemperate, was ſuch, that it taught the people ſubmiſſion and reſpect to the government, even while he diſapproved its meaſures. He was not impatient of ſilence, when on his duty in parliament. He diſdained to teize and haraſs miniſters on occaſions on which it was not likely that more could be effected. But rarely did he ſuffer one opportunity to paſs on which his public advice might have any chance, either to ſuggeſt good, or to avert evil, without boldly and earneſtly declaring it in the conſtitutional aſſembly of his peers. His oppoſition could not but operate, in ſome ſort, as a check upon miniſters in regard to that careleſſneſs and thoſe overſights to which human imperfection is, even in the beſt men, perpetually ſubject: and it certainly was never, in a ſpirit, nor of a force, effectually to weaken their hands, or thwart their endeavours, in the execution of any one meaſure of a tendency clearly beneficent.

When the concluſion of the preliminary treaty with France was announced in parliament, his grace was one of thoſe who, the moſt joyfully, hailed the news. True to the principles which he had ever profeſſed, he received Peace, as being in itſelf ſo eminently a bleſſing, that there could be ſmall reaſon for cavilling very ſolicitouſly about its terms. Not that he ſhowed any thing like a readineſs to ſacrifice to preſent eaſe, or to the pride of an inſolent enemy, either the true glory, or the real ſecurity of his country. But when he ſaw that theſe were in the treaty, ſubſtantially, though not too imperiouſly, provided for, he ſcorned to embarraſs its authors by the vexatious malignity of merely *throwing in their teeth*, what might, by a diſputant, be urged againſt it.

Though he, thus far, accorded in principle with the new miniſters, he betrayed no impatience to coaleſce with them in intereſts. What he judged to be conducive to the true welfare of his country, was the firſt object of his concern. To obtain for himſelf and his friends, a ſhare in the emoluments and official power of the executive government, was, with him, as with all whom he valued, a very inferior concern, however earneſtly it might be deſired for them, by thoſe who viewed from a diſtance the principal movements on the foreground of political life.

His eloquence was of a character too conſpicuouſly diſtinct and impreſſive, to be paſſed over without particular notice, even in this ſlight ſketch. When he was to ſpeak but a few words, he uſed a low tone of voice, and a manner affecting nothing of the orator, except ſo far as it was expreſſive of due reſpect for the auguſt audience which he addreſſed. If he ſpoke at ſomewhat greater length, but on a ſubject of ſecondary importance; his manner was manly, his language clear, his arguments cogent, and ſuch as could not but touch the common ſenſe and native feelings of men; yet, in his elocution, a tone of cadence, perhaps, too unvaried, would ſometimes predominate over emphaſis. It was when ſome queſtion deeply affecting the primary conſtitutional intereſts of his country, kindled all his faculties into the moſt fervid exertion, that he diſplayed a comprehenſion of views with a delicate acuteneſs of diſcernment, a ſkill in the artifices of perſuaſion, a fertility in the invention of topics of argument, an energy and a pathos of ſentiment, a copiouſneſs and force of language, a dignity, a diſtinctneſs, and a facility of elocution, ſuch as might have been contemplated with admiration by every other orator in the houſe of peers.

He was not leſs advantageouſly diſtinguiſhed by his zeal for the improvement of all the arts of rural economy which could be beneficial to his country, or could promote the welfare

of his own tenantry, and the cultivation of his eſtates. He was one of the members of the Board of Agriculture, the moſt attentive to its duties. In parliament, he readily ſupported every propoſition tending to perfect the agricultural legiſlation of theſe kingdoms. By the ſyſtem of culture that he introduced upon a domain of 3000 acres which he retained, as a ſort of experimental farm in his own immediate poſſeſſion; by the regulations under which he required his tenants to manage the tillage and cropping of their farms; by the ſheep-ſhearing meetings, and the prize ſhows of cattle, which he promoted to render the purſuits of rural economy faſhionable; he certainly contributed more than any other perſon of the age to advance thoſe arts in which really productive induſtry is chiefly exerciſed, and of which the proſperity is more eſſential than any thing elſe but knowledge and virtue, to the true felicity and the permanent welfare of theſe kingdoms. He promoted, by the ſame means, the augmentation of his own fortune. Not to ſpeak of the new buildings in Bloomſbury; the agricultural improvements alone which he began upon his eſtates, however in the firſt inſtance greatly expenſive, cannot fail, if duely proſecuted, to redouble, perhaps, within fifty or ſixty years, the general revenue from the eſtates of the dukedom. Every man of diſtinguiſhed ingenuity in the uſeful arts, had his encouragement and kind applauſe. He had, not more than a year before his death, engaged that good and moſt ingenious man, the Rev. Edmund Cartwright, at an annual ſalary of 500l ſterling, to ſuperintend the operations on his experimental farm.

His grace, till within a fortnight of his death, had enjoyed an uninterrupted ſtate of health, when on a ſudden he became ſo violently affected with a diſorder, termed by the faculty a *ſtrangulated hernia*, that it was found expedient to call in the ſurgical aſſiſtance of ſir James Earle, who, after a conſultation with others of the profeſſion, performed a ſkilful operation upon his grace, on Saturday the 27th of February, but, unfortunately, without the hoped-for ſucceſs; other profeſſional aid was then called in, but in vain; for his grace languiſhed in great agony, till a mortification took place on Sunday evening, and the ſecond day afterward he expired, after having made ſome important arrangements, with the greateſt fortitude and preſence of mind.

His much loved friend, Mr. Fox, pronounced his eulogy in the houſe of commons with unequalled tenderneſs and eloquence. The ſteadineſs of his friendſhip, and his eminence in all the private virtues and accompliſhments which endear a man to thoſe with whom he lives, have ever been praiſed with enthuſiaſm by all who knew him.—He is ſucceeded in the dukedom by his brother John.

His grace's will has been proved in Doctor's Commons; the following is a copy of it:

'I, Francis, duke of Bedford, do give unto my brother, John Ruſſel, all my perſonal property.—Dated this 27th of February, 1802.

BEDFORD.'

The will is witneſſed by lord Preſton, Dr. Kerr of Northampton, and Mr. Parker, the ſurgeon.—It was written in the duke's own hand, on a common half ſheet of paper, reſembling the cover of a letter—the writing is not ſo ſteady as uſual. His grace appears firſt to have ſigned the will without witneſſes, as his firſt ſignature is ſcratched out with a pen, and the name ſigned again below. By the date it appears that his grace believed himſelf in danger on the 27th. Beſide this will, he left a very long paper, ſealed up, of inſtructions to his ſucceſſor, which was ordered not to be opened till the will was proved.

THE BRITISH MUSE.

STREPHON:
A PASTORAL.

YOUNG Strephon was the pride of rural ſwains,
His fairer flocks the envy of the plains;
For him did Chloe pluck the morning flow'r,
And Phyllis rear the amaranthine bow'r;
But vain the labours of the village fair,
Vain too fond Amaryllis' partial care.
None pleaſed but Daphne; whoſe ſoft beaming eye
Oft from his breaſt would ſteal the tender ſigh;
No flow'r ſo ſweet, no gift ſuch beauties wore,
As that which Daphne pluck'd, which Daphne bore.
On every tree the partial knife was laid,
And Daphne, Daphne, every bark diſplay'd.
While length'ning ſhadows told the parting day,
Oft in the beechen ſhade fond Strephon lay;
And thus, while friſk'd his merry lambkins near,
Would pour his artleſs ſong in Nature's ear.
'Ye gentle zephyrs, ſporting thro' the air,
O hither haſte to hear a ſhepherd's pray'r;
If in the grove my love ſhould chance to ſtray,
Where ye delight to wanton on each ſpray;
O whiſper in her ears my frequent lays,
Say, Strephon's pleaſure, is his Daphne's praiſe.
Or if perchance ſhe wander in the meads,
Where the white ſtream the rich meander leads,
Roll on, ye waves, and tell her as ye go,
What praiſeful accents from her Strephon flow;
Ye gods! deny me every bliſs beſide,
But grant me Daphne,—all my joy and pride—
With her I'd wander thro' the flowery mead,
Be mine content to follow, her's to lead.
The birds would cheer us with the varied ſong,—
But ſweeter muſic falls from Daphne's tongue—
With faireſt hue the ſummer flow'rs would riſe,
But fairer beauty dwells in Daphne's eyes:
The gales would fan us with their ſweeteſt breeze—
But Daphne's breath is ſweeter far than theſe—
Ye birds why ſing ye when my Daphne's nigh?
Why ceaſe ye not, when Daphne paſſes by?
Ye flow'rs, why ſcatter ye your beauties wide?
Is not my Daphne nature's faireſt pride?
Ye gales, why blow ye when my Daphne breathes?
Ye blow to catch the ſweets her breath bequeathes.—
O yes, ſing on, ye little warbling choir,
Your pleaſing ſtrains my Daphne's breaſt inſpire.
Ye flow'rs, around extend your fragrant bed,
For Daphne loves the perfume that ye ſhed.
Blow on, ye gales, ſince all the ſweets ye blow,
Diffuſe o'er Daphne's cheek a richer glow.
Ah! 'twas in yonder ſweet, melodious grove,
My Daphne's charms firſt taught my ſoul to love.
Where like the bee within ſome fragrant bow'r,
I drank in ſweetneſs from the faireſt flow'r.
No more with wonted ſtrains the valleys rung,
All nature's choir was huſh'd, when Daphne ſung.
Alexis, hapleſs ſwain! the maiden lov'd,
For who can view ſuch charms, and not be mov'd?
I ſaw her ſhun the youth with cold diſdain,
'Twas joy to Strephon, to Alexis pain.
Ah, poor Alexis! why did fortune prove,
That you and Strephon ſhould be foes in love?
Beneath yon willow weeping o'er the ſtream,
Oft have I heard him pour the mournful theme;
Oft have I ſeen him drop the ſilent tear,
Which dropping, join'd the ſtream that rippled near.
Oft have I ſeen him wind o'er yonder hill,
Leaving his fleecy care to ſtray at will.
Reſtraining now, now urging on his pace,
Folded his arms, grief ſtamp'd upon his face.
How can I blame the ſorrows of his mind,
Such I had been, had Daphne prov'd unkind.

O quit, Alexis, theſe ungrateful ſhades,
And ſeek a kinder, midſt leſs lovely maids.
Some other Daphne may thy love entwine,
With love as tender, love as deep as thine.
Again thou may'ſt the ſweets of friendſhip learn,
And to theſe humble, happy ſcenes return.
Together then life's bleſſings we may ſhare,
Our Daphnes' happineſs, our fondeſt care.
Thro' nature's walks our way together bend,
Together all our flocks to paſture tend.
But ſee the ſetting ſun retires to reſt,
And fainter ſtreaks now paint the purple weſt.
The ev'ning dews fall on the ſilent glade;
Ye flocks return, and ſeek your nightly ſhade,
And I will follow as ye homeward wind,
Leſt one poor wand'ring lamb be left behind.'

R—S— JUVENIS.

THE ORPHAN BOY'S TALE.

BY MRS. OPIE.

STAY, Lady!—ſtay, for pity's ſake,
And hear a helpleſs orphan's tale;
Ah! ſure my looks muſt pity wake,
'Tis want that makes my cheeks ſo pale!

Yet, I was once a mother's pride,
And my brave father's hope and joy;
But in the Nile's proud fight he died,
And I am now an orphan boy!

Poor fooliſh child! how pleas'd was I,
When news of Nelſon's victory came,
Along the crowded ſtreets to fly,
And ſee the lighted windows flame.

To force me home my mother ſought—
She could not bear to ſee my joy:
For with my father's life 'twas bought,
And made me a poor orphan boy!

The people's ſhouts were long and loud,
My mother, ſhudd'ring, clos'd her ears:
'Rejoice—rejoice,' ſtill cry'd the crowd—
My mother anſwer'd with her tears.

'Oh, why do tears ſteal down your cheek,'
(Cry'd I) 'while others ſhout with joy?'
She kiſs'd me, and in accents weak,
She call'd me her poor orphan boy!

'What is an orphan boy?' I ſaid;
When ſuddenly ſhe gaſp'd for breath,
And her eyes clos'd;—I ſhriek'd for aid;
But ah! her eyes were clos'd in death.

Oh, were I by your bounty fed;—
Nay, gentle lady, do not chide;
Truſt me, I mean to earn my bread,
The ſailor's orphan boy has pride.

Lady, you weep,—what is't you ſay?
You'll give me clothing, food, employ!
Look down, dear parents, look and ſee
Your happy, happy orphan boy!

THE RETURN OF SPRING.

YET, again, Spring returns; and the fields, that lay dead,
Riſe to verdure and beauty beneath her light tread.
O'er the blue face of heaven, the thin vapours rove;
And the woods are the dwellings of muſic and love.

Ah, ſweetneſs of ſeaſons, thy joy-kindling breath
May revive trees and flowers, that were priſon'd in death;
But vainly thy ſunſhine and breezes ſhould ſtrive
To bid the the loſt joys of this boſom revive.

And therefore, ſweet ſeaſon, all bright as thou art,
The bliſs is imperfect thou bring'ſt this ſad heart:
Thy pleaſures are blended with tears, and with ſighs,
Like the ſhow'r-ſadden'd light of thy own changeful ſkies.

Thou bank of blue violets, thy bloom was diſplay'd
In the morning of life, when with Edwin I ſtray'd.
Again, at the ſoft voice of ſpring, wakes thy bloom;
But my friend ſleeps for ever—the ſleep of the tomb.

And you, oh ye roſe-buds, prepare to ariſe,
The pride of the earth, and delight of the ſkies!
But when will the maid, whom ye joy'd to adorn,
My Ethelind, riſe, and forbid me to mourn?

ON THE RELIGION OF AN EPICURE.

'Whoſe God is their Belly.'

HERE's my religion, Demas cry'd,
And to his *breaſt* his hand apply'd.
Oh! no, ſays Marcus, with a frown,
It lies a little *lower down*.

ON TWO VERY UNEQUAL LINES OF A TALLOW-CHANDLER.

JUST like the candles on his ſhelves,
His two dull lines the chandler mixes:
The firſt out metes the longeſt twelves;
The latter ſcarce exceeds his ſixes.

PRIVATE SUBSCRIPTION THEATRE *in* Tottenham-Court-Road.

A NUMBER of gentlemen and ladies of rank and fortune, agreed, about the beginning of the preſent year, to unite in a ſociety, to amuſe themſelves for a few evenings after ſuitable intervals, during the ſeaſon, with the repreſentation of plays on a private theatre, to which none but themſelves and their friends ſhould be admitted, either as comedians, or as ſpectators. They fitted up, with this intention, a houſe in Tottenham-court-road for their theatre. They gave it out as their principal object, to raiſe the drama of Britain, in reſpect of new pieces, from that wretched ſtate to which it is, at preſent, reduced by the miſmanagement and taſteleſſneſs, as they alledge, of the proprietors and directors of our public theatres. The proprietors of theſe theatres, ſuppoſing that their intereſts may be injured, if the new dramatiſts ſhall perſevere in their undertaking, are ſaid to have tried every means to divert or deter them from it. Even the public in general, ſeem, with the ancient Romans, to deem the art of the comedian or mimic, too mean to be ever exerciſed without diſhonour, by perſons of rank and fortune. It ſeems to be much doubted too, whether the new amuſement might not prove highly inauſpicious to the purity of the public morals. For the preſent, we preſume not to give an opinion on the ſubject. But we have pleaſure in preſenting to our readers the following lively and well-written Prologue, which was ſpoken by colonel Greville, at the opening of this new theatre, on Monday the 15th of March.

I come not courting plaudits, gentle neighbours,
They are the meed well won by toils and labours:
Labours, God knows, unleſs our cauſe betide well,
May ſend us all as Vagabonds to Bridewell!
I come, Director, Author, Actor, Poet,
So undefined my charge—I ſcarcely know it!
To ſay this night we work a revolution—
Nay, do not ſtart—in Routs—not Conſtitution!
To prove, you Ladies ſometimes may contrive
To paſs a night, not jamm'd, nor ſtew'd alive;
And when at Pleaſure's ſummons called together,
Find food for talk as pleaſant as the weather.
But ſome there are, who view with hoſtile eyes
This little Theatre of Mirth ariſe,
Who think that Female's claim to virtue o'er
Who's ſeen or heard four feet above the floor.
For, ſay theſe grave Reformers of the age,
If you muſt laugh, why laugh upon the Stage!
Have we not Games of good old Engliſh growth,
Made to preſerve our Countrymen from ſloth?
To thoſe reſort whene'er you want elating,
And laugh your fill at Boxing or Bull-baiting.
But other Critics ſtill more furious own
They'd head a mob to pull our playhouſe down:
And ſo becauſe they wiſely fancy dangers,
Lurk in the friendly aid—of liberal ſtrangers.
They'd head a mob! and thus would join to break
The very Law, perhaps, they help'd to make.
Shame on ſuch nonſenſe! is there one denies
That Taſte's a Stream whoſe Channel never dies?
Whether adorning France's wide domain,
Or richly fertilizing Britain's plain,
Still by the ſpot where wit, where Genius glows,
Her wave will ſparkle as her current flows.
Oh, then, deſpiſe the mean, the narrow rule,
That chains the mind to Cuſtom's ſervile ſchool!
Oh when fair Peace each ſocial bliſs reſtores,
Let Faſhion ope to Mirth her ample doors;
And ſpite of Paragraphs or Playhouſe Faction,
Here let her firmly fix—her centre of attraction.

The Interlude conſiſted of a ſhort dialogue, written by Mr. Greville, who appeared as Mr. Lively, a manager in diſtreſs. It turned upon the reports which had been circulated through the newſpa-

pers, of the immorality and pernicious tendency of the new theatre, which had obtained ſuch general belief, that the ſubſcribers who had been the foremoſt to patronize it, and under whoſe auſpices the project was to be brought to maturity, were ſending in excuſes every hour that they could not give it any further encouragement. The manager's clerk, who had been out collecting ſubſcriptions, next appears; but he alſo is full of diſappointments. When he is introduced to lady Tippet, who is at breakfaſt with her lord, for her ladyſhip's ſubſcription, the noble peer is aſtoniſhed ſhe ſhould have expoſed herſelf to ſo much riſk, or countenance ſo much immorality.—He tells her ſhe will certainly be ſent to the Round-houſe; and at length plays upon her apprehenſions ſo forcibly, that my lady ſends her excuſes to Mr. Lively, and is ſorry ſhe can have nothing further to do with him. The clerk meets the ſame fate at other houſes, and inſtead of collecting ſome hundreds, he brings home only 18l. which he begs leave to pocket for the arrears due to himſelf, and gives in his *congè*. Excuſes alſo pour in from the performers, who had been engaged; in this dilemma, Mr. Lively is called upon by a phyſician, in the old coſtume of dreſs, (perſonated by Mr. Maddocks) to whom he imparts his diſtreſſes, and aſks for aſſiſtance.—The latter ſays he can perform the part of a lover, if one ſhould be wanted. At length a groupe of ſtrolling players, hearing of Mr. Lively's diſtreſs, come to offer their ſervices, which are accepted; and thus the interlude concludes.

The two after-pieces were French proverbs, called 'Zing Zing.' and 'Les Foux.'

Almoſt all the actors are French. Even the women's parts were performed by young Frenchmen. There were no female performers.

The company then withdrew to ſome rooms up ſtairs, while the theatre was transformed into a ſupper-room. The repaſt conſiſted of a cold collation.

IMPERIAL PARLIAMENT.

HOUSE OF LORDS.

Wedneſday, February 24.

THE royal aſſent was given by commiſſion to the exchequer bills bill, the Weſtminſter fiſh ſale bill, the ſouthern whale-fiſhery bill, and ſeveral private bills.—Adjourned.

Friday, March 19.

The royal aſſent was given by commiſſion to the cinnamon duty bill, the exchequer bills bill, the indemnity bill, and the Greenland fiſhery bill.

HOUSE OF COMMONS.

Monday, February 23.

MR. MANNERS SUTTON.—From what had paſſed when the ſubject of his majeſty's civil liſt was before the houſe, an idea might have been entertained that he ſhould bring forward a motion reſpecting the arrears due to his royal highneſs the prince of Wales from the Duchy of Cornwall. That there was foundation for ſuch an idea there could be no doubt, and probably he might bring forward a motion of this nature at a future period. At preſent, however, he was deſired by his royal highneſs to abſtain from any motion whatever reſpecting the affairs of his royal highneſs, until the committee appointed to conſider the accounts of his majeſty's civil liſt ſhould have made their report, and the houſe come to ſome determination on the ſubject. He was deſirous that the houſe ſhould refrain from any comment upon or alluſion to the affairs of the prince of Wales, until that deciſion took place, and until it was reſolved whether or not the debts of his majeſty's civil liſt ſhould be diſcharged.

Tueſday, February 24.

Dr. LAWRENCE roſe.—Rumours had prevailed, and he was anxious that the public mind ſhould be relieved from an anxiety which had ariſen in conſequence of theſe reports, namely, that Denmark had not acceded to the convention between this country and Ruſſia. The commerce between England and Denmark was ſuſpended in a certain degree, and veſſels loaded for that country remained in our ports with their goods nearly in a ſtate of corruption. He hoped that the noble lord would excuſe him for putting the queſtion, whether or not Denmark had actually acceded to the convention with Ruſſia?

Lord HAWKESBURY replied, that the court of Copenhagen had acceded to the convention, and that the ratification of the treaty had been received by his majeſty.

Thurſday, February 25.

Mr. BURDON brought up a petition from Henry Greathead, of South Shields, ſtating that he had diſcovered an invention

of great utility, namely, that of a life-boat, by which many perſons had been ſaved. An advertiſement had appeared, offering a premium for the beſt model of ſuch a boat, and the petitioner preſented one which had been ſince adopted. It had been frequently uſed at Yarmouth, Lowеſtoffe, and other places on the coaſt, and had always been attended with ſucceſs. The petitioner had no means of remuneration for his valuable invention by building theſe boats, and therefore prayed that he might receive ſuch reward as might ſeem proper to the houſe.

Mr. G. ROSE agreed with the ſtatements in the petition. He wiſhed that the life-boat was in general uſe upon the coaſt, as he had witneſſed an inſtance of a veſſel having ſtruck ſo near the ſhore, that the crew could be ſpoke with; and notwithſtanding this, there was ſuch a dreadful ſea, that no common boats could put off to their aſſiſtance. The conſequence was, that theſe unfortunate men had been all drowned.

The petition was then referred to the conſideration of a committee.

The petition from the printers and bookſellers was ordered to be referred to the conſideration of a committee.

Tueſday, March 2.

On the motion of Mr. VANSITTART, the houſe went into a committee to conſider the duties payable on cinnamon, caſſia lignea, raw hides, and box-wood. He then generally ſtated, that the preſent duties upon theſe articles were too high, and that they ſhould be reduced one half. He then moved the following reſolutions:—That the duty upon every pound weight of cinnamon imported by the Eaſt India company ſhall be 1s 6d. That the duty upon every pound weight of caſſia lignea imported into Great Britain ſhall be 1s. That the duty payable upon raw-hides imported in Britiſh built veſſels ſhall ceaſe and determine. That upon every ton weight of box-wood imported in foreign bottom, from any part of Europe, there ſhall be a duty of 20s, and upon the ſame quantity imported in Britiſh built veſſels, a duty of 19s 6d.—Theſe reſolutions were agreed to.

Wedneſday, March 3.

The houſe reſolved into a committee of ſupply, and the different accounts of the army eſtimates were referred to its conſideration on the motion of the SECRETARY at WAR. He then ſtated that the army eſtimates before the committee, and upon which he propoſed to found certain reſolutions, did not at all relate to the general ſervice of the army, but only to particular branches. He then moved, that 61,000 men be voted for the ſervice of Great Britain, from the 25th of March to the 25th of May next.

Mr. ELLIOTT did not mean to offer any objection to the motion, but he thought it rather ſingular that the ſupplies ſhould be called for in ſuch a manner. He thought that if they were at all neceſſary, they ought to be for a longer period than two months. Several conſiderations preſſed upon his mind when he made ſuch an obſervation. We had lately ſeen preliminaries of peace ratified between this country and France, and that having been the caſe, he could not think ſuch a force at all conſiſtent with that event. But when he looked at the ſucceſſion of events, various in their completion, and diverſified in their nature, although ultimately producing a like effect, which had occurred ſince the ratification of the preliminaries, he could not help thinking them highly alarming to the country. He did believe that when gentlemen gave their approbation to the preliminary treaty, that they conceived France to be actuated by a ſpirit of moderation, but little did gentlemen then think that the gigantic power of that country would be further ſtrengthened by a conſolidation of the Ciſalpine republic. He was afraid, if we tacitly allowed ſuch incroachments, that this country might, bye and bye, experience the ſame fate. This was not all: we had ſeen, pending a negociation, a large and powerful fleet ſail from France to the Weſt Indies, treating this country as it were with a ſort of contemptuous neglect, and without any communication, he firmly believed, having been made of its real and ſpecific object. If miniſters had made enquiries upon this ſubject, and got no anſwer of a poſitive ſatisfactory nature, they ſhould not have allowed it to ſail. Since that fleet ſailed it had been reinforced by parts of the French, Spaniſh, and Dutch navies. It was difficult to conceive what force the French republic had to encounter in the Weſt Indies, which could poſſibly render the preſence of ſuch an armament neceſſary. England had a right to reſiſt the ſailing of ſuch expeditions, even in profound peace. It would at leaſt have been proper in the government of this country to have ſent an adequate force to the Weſt Indies. Having ſtated theſe points, and enlarged at conſiderable length, he drew an inference from the lengthened ſtate of the na-

gociation as not favourable to this country. He thought that the period ſince the concluſion of the preliminaries of peace had afforded ample ſpace for the adjuſtment of every difference between the parties, and inferred that the houſe had a right to call upon miniſters for an explanation of the cauſes which had produced the delay.

Lord Hawkeſbury began with remarking, that however proper the ſpeech of the hon. gentleman might be upon any other occaſion, it was not ſo delicate at preſent, neither had it any connection with the motion before the committee. The hon. gentleman had expreſſed great alarm for certain events which had occurred ſince the ratification of the preliminaries. To every thing which might be any wiſe injurious to the intereſts of this country ſince that event, his majeſty's miniſters were certainly liable, and when proper occaſion happened, his majeſty's government would not refuſe to give every information upon the events which have ariſen from the beginning of the negociation until its termination. It was therefore improper at preſent for him to give any anſwer whatever. There was only one ground upon which an anſwer could be expected, which was, that if the negociation had been protracted beyond a reaſonable time, or even, he might ſay, an unuſual period, then parliament had an undoubted right to preſs for explanation. He would even admit, that the inconveniences attending a negociation had protracted the preſent beyond what was at firſt expected, but if it was conſidered what a variety of intereſts were involved in the final arrangement, it would appear that no time had been waſted upon frivolous or unneceſſary purpoſes. The period between the preliminaries and the definitive treaty in 1783, was that of many months. He would ſtate, however, that miniſters were as ſolicitous to bring the preſent negociation to an end, as any man, or ſet of men, poſſibly could be. No means had been omitted to bring it to ſuch an iſſue. Whatever might be the reſult of the treaty of peace, he ſhould never regret having been a party to a tranſaction creditable to this country, and which gave a chance, at leaſt, to the reſt of Europe of obtaining tranquillity. We had tried the experiment of war; let the experience of peace be tried, and let it be proved which was moſt deſirable. He concluded with ſaying, that whatever might happen, neither he nor his colleagues would ever ſhrink from inveſtigation.

Mr. WINDHAM thought ſome explanation neceſſary from the noble lord, but he had refuſed giving any anſwer to the ſtatements of his hon. friend (Mr. Elliott) There had been a great conflict in his own mind between calling the attention of parliament to the ſituation in which the country was placed, and the danger which might have reſulted from his having adopted ſuch a line of conduct. Certainly ſuch a motion might have been made, but he had thought it more adviſable to acquieſce in ſilence for a time, and ſeize an occaſion like the preſent, when an explanation might be given. Indeed he did ſuppoſe that miniſters themſelves would have anticipated him, by calling upon parliament for its advice and aſſiſtance. Of the negociation we could not judge, from its being of long duration; and as all time was long and ſhort, in proportion to what was to be done, he did not think that too much had been already conſumed. So many events have happened ſince the preliminaries were ratified, all bearing upon their very moral eſſence and tendency, that the ſtate of this country is entirely changed, and the very nature of the preliminaries completely altered. The houſe had not forgot, that the noble lord, upon a former occaſion, had ſaid, that there were three great things to be conſidered, time, terms, and tone. He was inclined to think that tone very much altered. If it had been aſſumed, or had exiſted in contradiction to every conſideration of the power of a great empire, it would have been wrong. It was not ſo. It had been the tone which this country had adopted, although ſhe was intitled to have uſed a higher one; it had been thrown down, and the more we are thrown upon it, ſo much more deplorable was our ſituation. France had uniformly avowed her intention to overthrow this country. Look at her operations every where, her proclamations, manifeſtoes, and the whole *et cetera* of ſtate papers, and we ſhall find the open and undiſguiſed deſign of overturning Great Britain. The preliminaries of peace eſtabliſhed that both parties were to ſtand ſtill, and to take no ſteps againſt each other, in the ſame manner as a town beſieged. The beſiegers are not to carry on any works before the place, and the beſieged are not to repair their fortifications. This was exactly the caſe between this country and France; then how could her conduct ſince be reconciled in any other manner than a direct fraud. For inſtance, by the preliminary treaty, the territories

of Portugal in Louiſiana was expreſsly guaranteed to her; but a treaty unknown to this country was entered into, by which only part of theſe territories was guaranteed to our ally. What was this? How could ſuch conduct be at all palliated, or ſoftened down? It was proper to ſtate theſe facts. Whether any ſteps ſhould be taken, he would not ſay. He wiſhed the houſe to attend to theſe truths, and to the actual ſituation in which we ſtood. Theſe things appeared dreadful to him, but there was one thing ſtill more ſo, namely, the apathy with which they ſeemed to be contemplated. If parliament went on with that ſort of blindneſs which had marked its late operations, he could not ſee how the exiſtence of the country could be at all reckoned upon. Auſtria and Ruſſia were the only two which he could call ſubſiſting countries. We are left in a ſituation where our great reſource, our commerce, may be withdrawn. The French have got empire and unbounded dominion, and will no doubt apply it to the purpoſe of our deſtruction. The ſubject was ſo vaſt, that he was appalled with its magnitude and importance. The country was indebted to his hon. friend (Mr. Elliott) for bringing on this diſcuſſion, and miniſters might treat the ſubject as they thought proper, but every day, if he might judge from what had paſſed, would furniſh new topics for animadverſion.

Mr. BAKER was not ſurpriſed at the negociation remaining unfiniſhed; he would, however, obſerve, that had the events which have ariſen ſince the preliminaries were ſigned occurred in a period of profound peace, they would have been deemed ſufficient for involving the country in a war. He thought alſo, that by withholding from an enquiry into the cauſes of the delay of the definitive treaty, that the reſponſibility of miniſters was increaſed.

Lord CASTLEREAGH thought the whole tenor of the arguments of the hon. gentleman went to throw deſpondency upon the public mind with regard to the definitive treaty. He did not wiſh that any ſuch ſentiment ſhould prevail, neither did he wiſh hopes of too ſanguine a complexion for its concluſion to be entertained. If the negociation ſhould fail, war muſt be reſorted to with manly firmneſs and energy, which were characteriſtic of the country. He would not ſay that diſaſters might not befal our colonies in the Weſt Indies, but it muſt be conſidered, that the ſituation of France with regard to her poſſeſſions in that quarter was very delicate. Miniſters had been blamed for allowing the French fleet to ſail before the concluſion of the definitive treaty. If that force had not ſailed at preſent, but when that object was accompliſhed, ſelf preſervation would then dictate that we ſhould ſend a fleet of equal force. This being the caſe, in point of expence alone, it was a preferable meaſure that the French armament ſhould ſail preceding the negociation. His lordſhip then ſtated the population of the French ſettlements, and contended that France was compelled to ſend a formidable force to be able to reduce them to the authority of the whites.—He concluded by repeating his wiſh that too ſanguine hopes ſhould not be entertained for the concluſion of the definitive treaty, neither ſhould the moſt diſtant degree of deſpondency be allowed to pervade the public mind.

Dr. LAWRENCE followed in ſupport of the arguments of Mr. Elliott and Mr. Windham. He was replied to by the attorney-general, and after a few words from Mr. Elliott in explanation, the following reſolutions were put and carried;

That 61,000 men be voted for the ſervice of Great Britain for three months, from the 25th of March to the 25th of May, 1802. That 23,000 men be granted for the ſervice of Ireland. That 309,577l 9s 4d, be granted for guards, garriſons, &c. in Great Britain: 120,423l 10s 2d, for Ireland: 386,657l 11s 10d for troops in the plantations, including the garriſon of Gibraltar, Malta, Egypt, the Cape of Good Hope, and New South Wales: 6,251l for four troops of dragoons, and ſeventeen companies of foot, in Great Britain, recruiting for the army in the Eaſt Indies: 41,189l 7s 10d for the ſencibles in Great Britain: 84,013l 7s 7d for ſencibles in Ireland: 99,064l for the barrack department of Great Britain: 59,307l 13s 11d for the barrack department in Ireland: and 75,511l for foreign corps in the ſervice of Great Britain.

The houſe then went into a committee of ways and means.

Mr ADDINGTON ſtated, that whatever difference of opinion might prevail upon other ſubjects, he had thought it adviſeable to move for a temporary ſum, rather than that the public ſervice ſhould be any way embarraſſed. He then moved, that toward raiſing the ſupply to be granted to his majeſty, there ſhould be raiſed a ſum of one million by loans of exchequer bills. The reſolution was agreed to. Adjourned.

Friday, March 5.

Mr. VANSITTART moved the ſecond reading of the American Treaty bill. The queſtion having been put,

General GASCOIGNE roſe. The time which had elapſed ſince the firſt reading of this bill had given him an opportunity of forming, in his opinion, a correct eſtimation of its merits. He felt ſo many objections to it, and doubts of its principle, that he viewed it with every jealouſy and diſtruſt, as a meaſure infringing upon the Navigation Act. It was to that act we owed our commercial proſperity, and it had enabled this country to ſtand an unexampled inſtance of ſecurity reſulting from our commerce. By the commercial treaty, the ſhips of America were allowed to trade with this country, as thoſe of the moſt favoured nations. Now if the duties payable by theſe ſhips are taken off, the ſame indulgence ought to be ſhown to thoſe of other nations. He concluded by obſerving, that there could not poſſibly any injury ariſe from the bill ſtanding over until the end of the ſeſſion, in order that it might be ſeen whether America felt diſpoſed to act in a reciprocal manner.

Mr. VANSITTART replied, that ſo far from the repeal of the duties being an excluſive advantage to America, ſhe would only be placed upon a ſimilar footing with other nations. So far as he recollected the Navigation Act, he could ſee no connection between that act and the argument of the hon. gentlemen, as America was not allowed, by this bill, to import to this country any other than American produce. The effect of the preſent duties would have a perpetual tendency to drive the trade of America from the Baltic ports. That trade was valuable, as being a trade of conſignment and depoſit. The preſent bill was founded upon grounds of national faith and general policy. After having replied to the general arguments of the laſt ſpeaker, he concluded, by hoping that no objection could be made to the bill, as it had the ſanction of the Board of Trade.

Dr. LAWRENCE ſpoke againſt the bill. The learned gentleman took a moſt comprehenſive view of the queſtion, and inferred, that without care and vigilance, our commerce would be eſſentially injured.

Lord HAWKESBURY was ſorry the learned gentleman had diſplayed ſo much knowledge to ſo little purpoſe. To the bill, no man poſſeſſed of common ſenſe could poſſibly object. If it at all infringed the Navigation Act, he himſelf would be its moſt decided enemy. The Americans thought proper to lay duties on the tonnage of foreign ſhips trading to the United States, and cargoes brought by foreign veſſels, and cargoes of the ſame kind brought by her own ſhips paid no duties. When the treaty was made in 1785, this country impoſed duties on American ſhips, in order to put them upon the ſame footing with thoſe of this country. Now if America repealed theſe duties, and we did not, they could not be called countervailing, but new duties, and if they were taken off by America, this country was bound in honour, good faith, and policy, to do the ſame, the more eſpecially as a notice had been given to one of his majeſty's ſecretaries of ſtate, that it was in contemplation of the American government to repeal them.

Mr. WINDHAM followed, and uſed a variety of arguments ſimilar to thoſe of Dr. Lawrence. He did not object to the bill; he only wiſhed that official notice ſhould be received by government that the duties were repealed in America, before a ſimilar meaſure was adopted here.

Mr. ADDINGTON ſpoke in favour of the bill, and replied to Mr. Windham. No one could look at the power of France with indifference, but, although it might excite our vigilance, it gave no room for any deſpondency. He looked to ſafety from the energy of the public mind, that great conſervative of the conſtitution; otherwiſe that Coloſſus might overthrow us. It was in the minds of the people that he felt a counterpoiſe to that power.

The bill was then read a ſecond time.

Wedneſday, March 10.

The houſe went into a committee of ſupply, when the following reſolutions were agreed to:—That 130,000 men be granted for the ſea ſervice for two lunar months, from the 26th of March. That 481,000l be granted as wages to thoſe men for the ſame period; that 494,000l be granted for victuals for the ſame period; 780,000 for wear and tear of the ſhips; and 65,000l for ordnance on board theſe veſſels.

Thurſday, March 11.

The Exchequer Bills bill, and the Indemnity Qualification bill, were ſeverally read a third time and paſſed.

Mr. SIMEON roſe, to move for leave to bring in a bill for diſtinguiſhing induſtrious from other paupers. He ſtated that the nature of pariſhes was ſo varied and different, both in their extent and population, that nothing could be effectually done for the relief of the poor, unleſs a clear

and ſolid foundation was laid down for regulating the poor laws, and the accounts of the collectors of the poor's rate. His object was to enable every pariſh, if it ſhould chooſe ſo to do, to execute the exiſting laws in a more effectual manner, and that the accounts of the overſeers of the poor ſhould be audited four times every year, after public notice ſhould be given to that effect. After having enlarged upon theſe points, he concluded by moving for leave to bring in a bill for the better diſtinguiſhing and relief of induſtrious pariſh paupers, and for more effectually regulating the accounts of overſeers of the poor, and for the preſervation of the lives of adjudged baſtards.—Leave given.

Monday, March 15.

Mr. ADDINGTON called the attention of the houſe to the corn trade between England and Ireland. He ſtated, that the houſe muſt be aware that this was a ſubject of the higheſt importance, whether conſidered in an abſtract point of view, or in the more general light of national conſideration. The difference in the prices of grain in Ireland was great, but the difference between thoſe prices and thoſe in England was prodigious. Laſt year there had been frequent inſtances where corn was double the price in Ireland that it was in this country. Having enlarged upon theſe points, he concluded by moving, that a committee be appointed to conſider the ſtate of the corn trade between England and Ireland, and report their obſervations thereon to the houſe.—Agreed to.

The American Treaty bill was read a third time and paſſed.

Tueſday, March 16.

Mr. W. BOOTLE brought up a bill to require overſeers of the poor to keep regiſters of the ſeveral pariſh children bound by them as apprentices.

Mr. FOX roſe for the purpoſe of moving a new writ for Taviſtock, in the room of lord John Ruſſel, now duke of Bedford. In making this motion he felt impreſſed by feelings to which he could ſcarce give utterance, when he conſidered the character, the high merits, and the general eſteem in which the late duke of Bedford was held. He was ſure that the houſe would allow him to ſay that a more dignified, exalted, and univerſally reſpected nobleman, never exiſted. He was a man of the moſt ſound mind, profound judgment, and general knowledge, of which this country could at any time boaſt. The whole tenor of his life had been to benefit his fellow-creatures; and if he had at any time failed, the fault was not his own, but had ariſen from thoſe cauſes which were impervious to the ſight of mortals. He did not wiſh to dwell upon thoſe topics, they were equally painful to the houſe as to himſelf. The conduct of his grace, as a member of the legiſlative body of the kingdom, had been uniformly marked by firmneſs. He diſliked violence and oppreſſion; but he had ever been the aſſertor of the privileges of the crown, the enactments of the legiſlature, and the laws of the country in general. To ſay that he lamented him would be ſaying little; he had ever cheriſhed the higheſt reſpect and veneration for his character, and viewing that character as one of the moſt perfect in this ſublunary world, he did ſay, that he felt its loſs as one of the moſt ſevere which the country could experience. Mr. Fox concluded by moving, that a new writ be iſſued for a burgeſs to ſerve in the preſent parliament for Taviſtock, in the room of lord John Ruſſel, now duke of Bedford.

The motion was put and carried.

Friday, March 19.

Mr. ADDINGTON roſe, purſuant to notice, to move for certain accounts relative to the tax upon income. He moved, That there be laid before the houſe an account of the groſs aſſeſſment and nett produce of the income tax for the year 1801. An account of the groſs aſſeſſment for the year ending the 5th of April, 1801, diſtinguiſhing the number and amount of aſſeſſments under 200l per annum—from 200 to 500l—from 500 to 1000l—from 1000 to 2000l and upward; and alſo the ſeveral deductions made for children. An account of the amount of perſons and their income, as calculated from the aſſeſſments of 1801; and an account of the aſſeſſments for 1802, diſtinguiſhing England from Scotland, and diſtinguiſhing the ſeveral counties of England. Theſe accounts were ſeverally ordered.

Mr. JONES was happy that the chancellor of the exchequer had moved for certain accounts relative to the income tax, as theſe accounts would be got ready with greater expedition, than if they had been moved for by any other individual. He wiſhed to know whether that right hon. gentleman meant to found any motion upon theſe accounts?

Mr. ADDINGTON replied, that motions for production of accounts were always regularly tranſmitted to the clerks of the different offices, and he knew of no preference whatever being given. From what had lately paſſed upon the ſubject of the

Income tax, he did expect that the hon. gentleman would have acquieſced in what then appeared to be the general opinion of the houſe, namely, that no propoſition with reſpect to this tax ſhould be brought forward until after what is commonly called the opening of the budget. He could aſſure the hon. gentleman, that whatever opinion he (Mr. Addington) might entertain, that it was founded upon the moſt mature deliberation, and that no proceeding of any aſſembly, however reſpectable, ſhould deter him from the courſe he had reſolved to purſue; he meant from laying before the houſe the reſult of his deliberation, and allowing them to decide upon the queſtion.

[To be continued.]

FRANCE.

ST. DOMINGO.

A LETTER from admiral Villaret, dated Feb. 10, from on board the Ocean, in the road of the Cape, gives an account of his voyage, and that they made Cape Samana in forty-ſix days from their leaving Breſt. On the 2d of February the diviſion of general Rochambeau landed in the Bay of Mancenille. A mulatto named Sangos, exerciſed the office of captain of the port at the Cape, and went on board the Ocean. Inſtead of conſenting to pilot her into the Cape, he declared that the black general Chriſtophe had ordered him to acquaint us, that the whites would be maſſacred, and the city ſet on fire, the inſtant the ſquadron attempted the harbour, if the French refuſed to wait the return of a courier which he had ſent to Touſſaint Louverture. The French commanders thought that ſo deſperate a reſolution could only have been inſpired by fears injurious to the French government. The general in chief, Leclerc, wiſhed to write to Chriſtophe, to inform him of the friendly intentions of the firſt conſul, and to attempt to bring him back to his duty, by explaining what was due to a ſoldier and a Frenchman. Enſign Lebrun was charged with this delicate miſſion. The captain of the port was kept on board, and the fleet ſtood off and on. On the 4th, enſign Lebrun brought back the anſwer of general Chriſtophe, containing an abſolute refuſal to receive the army, and a poſitive reſolution to burn the city, in caſe the French perſiſted. Chriſtophe had formally declared that he would receive no orders but thoſe of Touſſaint. A deputation of the inhabitants of the Cape went on board the French admiral, begging him to deſiſt, as the city would otherwiſe be deſtroyed. In the mean time, the twenty-four hours requeſted for the anſwer of Touſſaint elapſed; while all private accounts agreed, that he was in the city, or at leaſt in the neighbourhood, the inviſible ſpring of all the movements that had taken place. The general in chief ſent back the deputation, ordering the mayor to read to his fellow-citizens the proclamation of the firſt conſul, and to explain to them the perfidious intentions of their chiefs. Cæſar Telemachus, a negro truly French, performed that duty with the moſt heroic courage. From that moment it was neceſſary for us to give up all hopes of ſaving the city, or permit the French laws and the honour of the government to be trampled under foot. On the ſame day, the Syrene frigate brought intelligence of the ſucceſsful diſembarkation in the Bay of Mancenille, and the entry of the French troops into Fort Dauphine. All the troops were embarked on board the frigates, boats, and canoes, and ſtood in the night toward Limbe, but the calm prevented them from arriving during the night.—On the 5th, in the morning, the diviſion of frigates had not arrived at its deſtination, when diſpatches were brought from general Rochambeau, reſpecting the expedition to Fort Dauphine. The blacks had oppoſed the diſembarkation in the Bay of Mancenille, crying, 'No French! no whites!' at the ſame time firing at the canoes. On the ſame day alarm guns, along the coaſt, and the flames from ſome of the ſettlements, plainly diſcloſed the deſigns of the rebels. While the debarkation was going on from the frigates, two ſhips were ordered to preſent themſelves at the entrance of the harbour, to draw upon them the attention of the enemy. A fire of cannon and bombs was immediately opened on theſe veſſels. The approach of night obliged the fleet to retire from the coaſt, when the reflection from the horizon announced that the city was on fire, and the French troops were obliged the whole night to witneſs this ſcene, without being able to lend any aſſiſtance.—On the following day, the French admiral, taking advantage of the firſt breeze, made for the harbour, ordering all the ſhips to follow him. The forts were abandoned, and the ſquadron anchored at the Mole without damage. The ſhips' crews were immediately diſembarked.

The French troops arrived in time to ſave the lower part of the city. The French troops had taken poſſeſſion of all the country between the Cape and Fort Dauphine.

General Leclerc, in his letter, dated Feb. 9, gives a detail of his operations ſubſequent to his landing. At three in the afternoon of the 4th, he reached Port Margot. The diſembarkation was effected near that of Limbe. The enemy had one battery, which played upon the French, but they landed without loſs. The advanced guard reached the river at two o'clock. General Chriſtophe was poſted within half a league of them, at Morne-Engliſh; general Hardy, with his diviſion, moved to that point; at half a league on the road to the Cape he met the incendiaries who had come to ſet fire to the ſettlements. General Leclerc arrived with the advanced guard at the Cape, to put an end to the firing kept up between the troops diſembarked and the blacks. The rebels had ſet fire to the Cape Town, by general Chriſtophe's orders. Two expeditions were on their march for Port-de-Paix and the Mole. The French general had ſent to Touſſaint his children, with the letter of the firſt conſul, and he had given him to underſtand, that he would take it upon himſelf to receive his ſubmiſſion.

PROCLAMATION.

The Firſt Conſul to the Inhabitants of St. Domingo.

Paris, the 17th Brumaire.

Inhabitants of St. Domingo,

Whatever your origin, or your colour, you are all French, you are all free, and all equal before God, and before the republic. France has been, like St. Domingo, a prey to factions, torn by civil and foreign wars. But all has changed; all people have embraced the French, and have ſworn to them peace and amity; all the French have embraced each other alſo, and have ſworn to be all friends and brothers. Come alſo, embrace the French, and rejoice to ſee again your friends, and your brothers of Europe. The government ſends you the captain-general Leclerc; he has brought with him great forces for protecting you againſt your enemies, and againſt the enemies of the republic. If it be ſaid to you, Theſe forces are deſtined to deprive you of your liberty:—anſwer, The republic will not permit it to be taken away from us. Rally around the captain-general. He brings you abundance and peace. Rally all of you around him. Whoever ſhall dare to ſeparate himſelf from the captain-general, will be a traitor to his country, and the indignation of the republic will devour him as the fire devours your dried canes.

(Signed) BONAPARTE.

LAW REPORT.

COURT OF KING'S BENCH, Feb. 24.

Before Mr. Juſtice Le Blanc and a Special Jury.

Forſter *v.* Melliſh.

MR. Hovel opened the pleadings. He ſaid the declaration ſtated, that on the 28th of September, 1801, Eſther Melliſh, the defendant, being then a femme ſole, promiſed to marry Joſeph Forſter, the plaintiff, on the 12th of December, if ſhe ſhould then be alive and well, and he would execute certain ſettlements; that ſhe was, on the 12th of December, alive and well, and that he was ready to execute theſe ſettlements; and that, notwithſtanding, ſhe refuſed to fulfil her ſaid promiſe, to his great damage.

The attorney-general ſaid, he had the honour to appear for a young gentleman in a moſt reſpectable ſituation of life, and as reſpectable a character, who now complained of an injury the moſt deeply affecting to the feelings for which it was poſſible to apply to a court of juſtice for redreſs. He had been cut off from the enjoyment in marriage of a young lady, whoſe affections he believed that he poſſeſſed—in whom his whole ſoul was abſorbed—and in whom centered all his hopes of future happineſs. Mr. Forſter, born of reſpectable parents, had been regularly educated in the ſcience of phyſic. Having attended the lectures of the moſt eminent profeſſors for a conſiderable number of years, he had made ſufficient proficiency to enable him to practice as a ſurgeon; and in the year 1799, his friends adviſed him to ſettle ſomewhere in the neighbourhood of the metropolis. At that time Mr. Sands, who had carried on very extenſive buſineſs as a ſurgeon and apothecary at Highgate, was about to retire, and Mr. Forſter entered into a treaty to ſucceed him. Conditions were agreed upon; the buſineſs was transferred to him; he bought Mr. Sands' houſe, and was received with the greateſt favour by all the neighbourhood. Soon after he met

the preſent defendant, miſs Eſther Melliſh, a young lady of exquiſite beauty, and the moſt brilliant accompliſhments—a young lady whoſe natural endowments had received all the culture and poliſh of the moſt finiſhed education; whoſe perſon and whoſe mind were all that the fondeſt lover could deſire. They were at firſt mutually ſtruck with each other, and an intimacy was formed between them. But for ſome time fate was unpropitious to their loves, and it was not till the beginning of 1801, that the treaty was entered into, which was the ſubject of the preſent action. By his conſtant aſſiduities he then ſucceeded in rendering himſelf acceptable in her eyes, and ſhe on her part ſhowed the greateſt anxiety to fix his affections. They ſaw each other frequently, and when they found it impoſſible to meet, they correſponded by letter. At length ſhe plighted her vows to him with the greateſt ſolemnity, and betrothed herſelf as his future wife. Miſs Melliſh was the natural daughter of a man of very large fortune, who had left her about 10,000l. But the jury muſt not ſuppoſe that the plaintiff had been actuated by intereſted views. In the premium paid to Mr. Sands, in the purchaſe money of his houſe, and in the ſums of money he had ſince expended in decorating it for the defendant's uſe, he had laid out above 5,000l. He had not been driving a coarſe and ſelfiſh bargain. His perſon was elegant, his character irreproachable, his income conſiderable, and he was in every reſpect an adequate match for the young lady.—But though theſe were conſiderations to have great weight, ſhe had overlooked them. She was animated by love, not by prudence. Her letters warmly, though delicately, painted her paſſion. The learned counſel diſavowed all wiſh to give her unneceſſary pain by reading theſe letters in open court, or to inſinuate that any of their contents threw the leaſt cloud upon her character. Unleſs for inconſtancy he believed her conduct to be unimpeachable, but duty required him to leave no honourable means untried to procure juſtice for that man in whoſe happineſs ſhe had committed ſuch havock, whom ſhe had made the puppet of her caprice and the butt of her petulance; whom, expecting the immediate completion of his wiſhes, her wayward conduct her pierced with grief and ſunk in deſpondency. The effects of wounded pride, and of injured love were but too well known; and it would be proved by the witneſſes that this unhappy young man had been unable to ſuſtain the blow that had been inflicted upon him; that his mind was diſturbed, and his health materially impaired. Her brothers (one of whom lived in Gray's-inn, and the other was a tanner in the Borough of Southwark) had been at firſt averſe to the match: but their conſent had been obtained, the marriage-clothes had been bought, and the day appointed for the ceremony. Mr. attorney now proceeded to read the letters. He began with one dated the 26th of May, 1801. In this, miſs Melliſh (who was then living near Highgate, with Mrs. Gowland, her ſiſter, apologiſes to Mr. Forſter, for refuſing to meet him at ſome place where he wiſhed for an aſſignation. She ſays, 'I am perhaps too ſcrupulous, but you will allow that I err on the ſafe ſide. There is a word called propriety, to which women cannot be over attentive; and I am convinced that many innocent characters, for want of a little prudence, are tainted by the foul breath of ſcandal. However, if you will mention any road near town, not too public, I will meet you there in a hackney coach. I will pretend that I am going to viſit a friend, and will bring Wheeler (her maid) along with me. I do not approve of this plan, but I can think of no other.' In the next, dated May 30, ſhe ſays, 'I have received a letter for you, dictated by my brothers; but I will not ſend it, and I told them ſo. I hope, when they ſee that all my happineſs depends upon you, they will not object to our union. Pray do not blame me for not ſeeing you to night; you know my character is at ſtake. May heaven promote our wiſhes while they are good and honourable.' In the third ſhe obſerves—'My brother Sam has promiſed to enquire into your character and circumſtances, and I truſt he will at length withdraw his oppoſition. All that I fear is, that you are led away by an idea that my fortune is large. Indeed it is not. I wiſh it were, I ſhould more willingly beſtow it upon you. I hope you will bear with patience the temper of my brothers. I may never ſee you again, but you ſhall always retain the eſteem and friendſhip of the unfortunate Eſther Melliſh.' Many letters, Mr. attorney ſaid, paſſed between them in the ſame ſtile, when ſuddenly all intercourſe was ſuſpended between them. What a ſtrange caprice! She was immediately after anxious to lure him back, and pretended that this was merely a pretext for diſmiſſing him.—This interruption was occaſioned

by a letter, dated Auguſt 7, in the following terms :—'Sir, the ſtatement of your affairs, given into Mr. Vaux, turning out to be falſe, I am induced to liſten to the advice of my friends, on a point on which I think myſelf incompetent to decide; and, conformably to their wiſhes, I deſire that the connection between us may drop entirely. With every good wiſh for your welfare, I remain your obedient ſervant, E. M.'—She had received an anonymous letter, which gave her great uneaſineſs, and ſhe had cut with him from ſuppoſing that he was the author of it. On the 18th of Auguſt, ſhe wrote to her confidential friend, miſs Swaine, ſaying—'I ſend you the anonymous letter. I do not think it right to do ſo myſelf, but I think you might ſhow it to him, as if from me, and let him know that this was the only cauſe of my diſpleaſure. I likewiſe ſend you incloſed a letter for him. If your father and mother approve of it, I beg you will wafer it and deliver it to him. If I can bring him round again, I am determined to marry him in ſpite of my friends. I truſt to your father for the ſettlements. But I am afraid I ſhall have no occaſion for his aſſiſtance. As you ſay, 'I kicked the bucket too violently. How could I be ſuch a fool!' Upon this Mr. Foſter felt and expreſſed conſiderable reſentment. In a letter to him, dated Auguſt 22, ſhe ſays, 'Though you are unfeeling and unjuſt, ſtill I anſwer you. I confeſs that my conjectures with regard to the anonymous writer were wrong: but ſtill I do not deſerve your reproaches, and I thus feel leſs ſeverely the ſtings which they are meant to convey. To ſay I am ſorry for the uneaſineſs I have occaſioned you is all that remains for me to do, unleſs you would wiſh your letters to be returned.' Afterward, by miſs Swaine's good offices, a perfect reconciliation was effected, and the tenderneſs of both parties was revived. Still, however, miſs Melliſh interpoſed unneceſſary delays, and now living at a conſiderable diſtance from Highgate, engroſſed more of Mr. Forſter's time than a profeſſional man could poſſibly ſpare. Vexed and impatient, he wrote to her, ſaying that, unable to bear her diſdain any longer, he had reſolved to fly to a foreign country, where her image might be baniſhed from his boſom. On the 28th of September, he received the following anſwer: 'It is uſeleſs to lament, as it is impoſſible to recal any part of my injurious conduct. To diſtreſs you was very far from my thoughts. I was kept back by the torturing certainty that in becoming yours I ſhall loſe all my dear relations as completely as if they were ſeparated from me by the hand of death. You ſay your happineſs is ſtill in my power. The ſincerity of this declaration will ſoon be put to the teſt. I beg leave to inform you, that if you do not agree to the ſettlements as propoſed by Mr. Swaine, I now write to you for the laſt time. But if you ſhall execute them agreeably to his directions, it is my poſitive and fixed reſolution on Saturday, December 12, to forſake my relations for the protection which you offer me. If you are not actuated by honourable motives, may the Almighty take me to himſelf before I follow you to the altar. If you love me as you ſay, I pray heaven to prolong our lives, and to guide us in the path on which we are about to enter.' On the ſame day, ſhe wrote her friend, Mr. Swaine, of the manner in which ſhe wiſhed her fortune to be ſettled. The next letter read was to her friend, miſs Mary Swaine, whom ſhe addreſſes under her nic-name. 'My dear Paul-frizzle, (ſays ſhe) I have had a delightful game at romps with captain William Lowther. If I am to marry a certain perſon, I muſt come to town immediately to buy the marriage things. Mrs. Lowther has aſked me to go with her for a month to Brighton, but I have ſcarcely time, though it is a month to the time of my marriage. You know I was determined not to have a bed-fellow till the warm weather was gone, and you will allow I was in the right.' In another, dated October 3, ſhe ſays, 'Forſter agrees to every thing I aſk, and would conſent to the ſettlements being ſtill leſs in his favour if I were to deſire it.' In one to himſelf, dated November 10, 'Yeſterday your ſervant brought me your miniature. I wiſh that miſs Mary Swaine may be allowed to go with us to Bath; I have ſent you a ring the ſize of my finger.' The next was likewiſe to him, and here ſhe ſays, 'Laſt night we ſat up romping till one. My bed-room door was broke, and I was obliged to change my quarters for the night. Are you not afraid to take ſuch a mad-cap into your houſe? I muſt tell you how it was. I had ſnatched a piece of paper the two miſs ——'s were reading, and put it into my pocket; they inſiſted upon recovering it, and in the ſtruggle, to my unſpeakable confuſion, down dropped your picture on the floor.' Mr. Forſter was no doubt delighted to find her in ſuch ſpirits on the

eve of her nuptials. We little know what may befal us. Without the leaſt ſymptom of change, or notice of impending calamity, he was in a few days plunged into the depth of deſpair. He received the following letter, dated Friday, November 27: 'Sir, the treatment I have lately experienced has brought back all my former objections with redoubled force. I am more than ever averſe to your offers, and it is my unequivocal determination, unbiaſſed by any one, to decline the connection. Your humble ſervant, E. M.' She does not, ſhe dared not alledge what the bad treatment had been.—She knew that his treatment had ever been kind, his affections warm, and his intentions honourable. It would appear that this letter had not been conveyed in the ordinary way; that it was intended as a legal notice, and that the lady did not delay many hours to retain counſel. Her fickleneſs was not without examples, but in few had the revolution been ſo ſuddenly effected. She had been writing that ſhe doated on his miniature, that ſhe looked upon it with inſatiable deſire; that ſhe gazed upon it till ſhe was incapable of diſtinguiſhing different objects, and in four days ſhe was in a lawyer's conſultation room. The manner in which ſhe addreſſed her friend ſhowed her ſang froid. 'Dear Mary,' ſays ſhe, having declined Mr. Forſter's propoſals, 'I have to beg that you will not proceed any further in the preparations. I am ſorry to hear your mother is ailing, but hope ſoon to hear good accounts of her.' As if nothing had paſſed but propoſals! Mr. Forſter was as certain of poſſeſſing her perſon as if he had been married in the morning, and eagerly expected the hour of happineſs. Although the man was unexceptionable, and had been univerſally eſteemed, it muſt naturally now be ſuppoſed that he had been guilty of ſome ſtrange and myſterious wickedneſs. The world muſt believe that the lady had a ſtrong though a ſecret cauſe for her conduct. Compenſation to the plaintiff was impoſſible—but it was the duty of the jury to ſet him right in the eſtimation of the world, by ſhowing that, after a ſtrict ſcrutiny, they were convinced he had acted with honour, and had ſuffered undeſervedly.

Miſs M. Swaine, the firſt witneſs, ſtated at great length all ſhe knew about the intercourſe between the parties. The hand-writing of the letters being proved, they were then read. On her croſs-examination, ſhe allowed that ſhe had given facilities to the clandeſtine correſpondence between the lovers. While miſs Melliſh was living at Mrs. Gowland's, her friends were ignorant of her intercourſe with Forſter, and would have diſapproved it. She uſed to ſhow Forſter paſſages from her friend's letters, which were written in confidence; but ſhe did not communicate to him her own letters before ſhe diſpatched them. The letters of miſs Melliſh, which had been read, had been taken from her by her father after the action was brought. She did not think of burning them upon her friendſhip with the writer cooling. She had pleaded Forſter's cauſe with all her ability.

Mr. Price, an attorney, ſaid, he had treated for the plaintiff with Sands; a premium of 1600l was given, the buſineſs being worth between 800l and 900l, and taken at two yeare purchaſe. Forſter is held in the firſt eſtimation in his profeſſion, and has great and increaſing practice. He is received as a gentleman into all the firſt families in the diſtrict, and is uncommonly agreeable and well-behaved. In witneſs' opinion he was an abundantly good match for miſs Melliſh. Mr. Price was going on to ſay, that he had been very poorly of late, when this evidence was objected to.

Mr. Garrow aſked, whether he had not been ſo poorly as to be owing him (the witneſs) 1700l?—A. He does.

Mr. Swaine ſtated, that miſs Melliſh had 13000l in the 3 per cents. In November ſhe gave him a warrant of attorney to ſell out 300l, for the purpoſe of buying the marriage clothes. He was intruſted by her to ſuperintend the drawing of the ſettlements, and the plaintiff readily conſented that one half of her fortune ſhould be ſettled upon herſelf. He ſaw her brothers at Gray's-inn coffee-houſe, and communicated to them all the proceedings which had taken place. On the 25th of November, miſs Melliſh was at his houſe, when ſhe ſeemed firmly reſolved to carry the match into effect.

Mr. Thornton gave an account of the plaintiff's family, whoſe father had been one of his tenants in Yorkſhire; and Mr. Sands declared his income, from the practice to which he had been introduced by the plaintiff, to be about nine hundred pounds a year.

Mr. Erſkine then began an able ſpeech of three hours in behalf of the defendant. He ſaid there was no doubt that the unfortunate young lady for whom he was counſel had given a promiſe to marry the plaintiff. The queſtion was not, whether the promiſe exiſted, but whether it was not more honoured in the breach than the

obſervance? The law of England was peculiarly delicate upon the ſubject of marriage. All other contracts ſunk into inſignificance, compared with this; and the law therefore viewed it in a very different light. In tranſactions concerning property, parties arrived at the years of diſcretion were always bound by their acts: but not only were marriage contracts not only not uniformly binding, but to enter into them without the conſent of parents was often highly penal. Though there was a period fixed in this and every other country for maturity, yet it could not be ſaid that the very moment children touched upon the age of twenty-one, they ſhould be entirely at their own diſpoſal. The jury were to conſider whether the plaintiff had not entrapped a young creature into a void promiſe by unmanly arts. They would ſee if he had had no regard to theſe miſerable three per cents.; if he had always burned with the conſtant flame of a lover; if, from the moment the dart was fixed in his heart, he had thought of no other object, and turned his whole ſoul to the honourable fulfilment of his views. When all theſe things appeared, in money he muſt be paid for his ſufferings; ſince this was the conſolation his delicate mind required; ſince, failing to acquire his fortune at the altar by marriage, he longed for a ſlice of it at Weſtminſter-hall. But how would they treat him if it appeared that, having no affection for her, he had ſported with her feelings; that he had tempted her into dangerous courſes, not to ſeduce her, for that was not his purpoſe, but, preparatory to a moſt diabolical ſcheme, to alarm her for her reputation; that he actually carried this ſcheme into effect; that he baſely frightened her with the threat of leaving the country; and that, in a moment of agitation, he had ſurpriſed her into this promiſe. Mr. Erſkine then began a reaſoned detail of the different tranſactions. His firſt object was to ſhow that the plaintiff, after having ſolemnly promiſed to the defendant's relations to diſcontinue his addreſſes, had courted her clandeſtinely. He here chiefly relied upon the anſwer of the plaintiff to a letter from Mr. Samuel Melliſh, wrote in the autumn of 1800, requiring him to give up all thoughts of his ſiſter. Mr. Forſter ſays, that he would pay the requiſition *all due regard*. Had he boldly avowed his intentions, and ſaid, that as the lady had now reached the age of twenty-one, and was miſtreſs of her actions, he was determined to do every thing that he could, as a man of honour, to gain her hand, ſtill allowing her the benefit of the advice of her friends, the learned gentleman allowed his conduct would have been laudable. He ſhould not find fault with a man, without a penny in his pocket, acting ſo toward a child of his own. But for the plaintiff, after having laid the lady's relations aſleep, and deprived her of her natural guardians, ſtill to proſecute his addreſſes by ſtealth, was a degree of meanneſs which language could ſcarcely expreſs.—However, Mr. Forſter imagined there was nothing to be done here at preſent, again abuſing the ſacred name of love, thought it right to be looking out for another good thing. During this interregnum of his paſſion for miſs Melliſh, he went and paid his addreſſes to a miſs Pooley, of whoſe father he borrowed 1700l. He had been received into the family for ſome time as the declared ſuitor of the young lady, and the day for the nuptials was about to be fixed; when Mr. Pooley told him all the fortune he could give his daughter would be, to chalk off the debt which her future huſband owed him. Whether the doctor had or had not taken any of his cooling medicines, he did not know, but this he knew, that the doctor inſtantly grew cold, and in a few days a rupture enſued. Being again at liberty, he thought he would try his hand once more at miſs Melliſh, who was then on a viſit to her ſiſter, Mrs. Gowland. He told her that all the while of his late courtſhip, his affections had been irrevocably fixed upon her. For this indelicacy ſhe had the good ſenſe to rebuke him. She aſked him, what ſecurity ſhe had for his ſincerity, when he avowed he had lately been hypocritically and diſingenuouſly making the ſame profeſſions to another? Mr. Erſkine read a letter from him, dated April 3, 1801, in which he ſays—'In open defiance of you and your relations, I am determined to renew my addreſſes. I hope your ſentiments are not altered; mine are unalterable. I feel for you the moſt ſincere and ardent affection. The firſt moment I ſaw you, you made an impreſſion upon my heart, and, while my heart beats, never will that impreſſion be obliterated. However appearance may have been againſt me, I have ever been truly yours.' What credit was to be given to the candour of this man? What reſpect was to be ſhown to wounded ſenſibility? Mr. Erſkine now came to what he conſidered one of the ſtrongeſt parts of his caſe; that the plaintiff had ſeduced miſs Melliſh into improper ſituations. He

dwelt upon it long, and read an immenſe number of the plaintiff's love letters in ſupport of his reaſonings. In theſe he recommends 'ſecrecy' again and again; he calls Mrs. Gowland, 'the old Argus;' he deſires miſs Melliſh to incloſe his letters to Mr. Wetherell, of New Bond-ſtreet, a friend of his; he anxiouſly warns her againſt premature diſcovery; he prays that Mrs. Gowland were dumb as well as deaf, adding, that her ſilence would be of the moſt eſſential benefit to ſociety. He preſſes her to agree to an aſſignation, urging, that abſence was to him 'purgatory;' (Mr. E. ſaid, this ſmelt of the ſhop); he propoſes Mr. Wetherell's, in Bond-ſtreet, where ſhe would be politely ſhown up ſtairs by miſs W. and ſee no one elſe, the corner of Bolton-ſtreet, Oxford-road, Kenſington-gardens, &c. He proteſts every attempt to meet her to be, in his eyes, an act of virtue, which muſt be highly pleaſing in the ſight of heaven. Being ſurrounded by thoſe who were keenly in his intereſt, and being without the advice of a ſingle relative or real friend, ſhe had ſometimes met him imprudently, and though from intereſted motives he refrained from all plans upon her virtue, as ſoon as he thought ſhe was caught in his toils, he proceeded to make the moſt ungenerous uſe of her ill placed partiality. On the 3d of Auguſt, ſhe received this anonymous letter, which ſhe read with indignation and horror:—'Dear madam, from motives of friendſhip I am induced to inform you, that attempts are making to deſtroy your character. As your ſincere friend, I would adviſe you to put an end to them as ſoon as poſſible. You have gone too far to retreat with honour. It is publicly known that you have had meetings during the night at Mrs. Gowland's, in Bond-ſtreet, and in Lincoln's-inn. This is the talk of the whole weſt end of the town. If it is in your power, inſtantly ſilence it by marrying Mr. Foſter. Putting off longer will only enable your brother to counteract your ſchemes, and to deprive you of all opportunity to retrieve your reputation. Haſten and have courage: thus concludes a friend who for the preſent conceal *her* name.'

In anſwer to a queſtion if he could make this letter evidence, yes, he ſhould render it indiſputable evidence; he ſhould prove that it was not only ſent by the plaintiff, but that it was in his own handwriting. He had diſguiſed his hand to look in ſome meaſure like a woman's; but not ſo that it might not be eaſily detected. The artifice was as clumſy as it was unprincipled. Witneſſes of undoubted veracity would ſwear to their belief, and if a doubt ſhould be made the law would allow a compariſon. The lady herſelf, it was already in evidence, inſtantly perceived the fraud, and with becoming ſpirit reſented it. He writes, to be ſure, 'the anonymous letter I utterly deny and diſclaim. If the author is a friend of mine, ſtill I abhor and deteſt him.' But would not any who was capable of this trick be capable of denying it? And who ſhould know what meetings had taken place, except the only man who had been privy to them? If miſs Melliſh had perſiſted in her reſolution of diſmiſſing him now, the world would have applauded, and the law would have protected her. She had indeed renewed her promiſes, but the original fraud would ſtill have its full effect in rendering them void, and he had afterward added what of itſelf would be ſufficient. Mr. Erſkine, laſt of all, dwelt upon the plaintiff's ſtratagem to terrify the lady, by perſuading her that he was about to leave the kingdom. By one of his letters he fully proved, that the plaintiff held out this threat; he maintained that this was the only cauſe of the defendant's reluctant compliance, and that as the plaintiff was evidently inſincere, the promiſe he had thus extorted was null. He denied that Mr. Forſter was an adequate match for miſs Melliſh. Every ſhilling he had paid to Mr. Sands he had borrowed from his friends, and except by this lady's fortune he had no hope of being able to repay them. Becauſe he lived in Mr. Sand's houſe, did it follow that he had Mr. Sand's buſineſs? If the attorney-general were to leave his chambers, as he ſoon might, on being raiſed to a higher dignity in the law, would the bag of his ſucceſſor be thus loaded with briefs? How would he look to a young man coming to aſk his daughter in marriage who ſhould ſay, Sir, I have got ſir Edward Law's chambers, and conſequently his practice? Having then ſummed up his various arguments with great ability, Mr. Erſkine intreated the jury to conſider a queſtion of what moment they were about to decide. It was nothing leſs, than whether the ſyſtem of fortune hunting was to be legaliſed and encouraged in courts of juſtice; whether rewards were to be held out to thoſe who ſtirred up young women to diſregard the advice of their relatives and the dictates of prudence; whether mar-

riage, the ſource of all that is dignified in our nation, was to be erected into an engine to promote the unprincipled ſchemes of needy adventurers?

The firſt witneſs was Mr. Pooley. He ſaid, that the plaintiff declared himſelf a ſuitor to his daughter in October 1800. He proteſted that he had fallen in love with her at firſt ſight, and that ſhe was the only woman with whom he could be happy. His courtſhip was notorious to all the inhabitants of Highgate. He owed the witneſs 1700l, and being reproved for his extravagance, a coldneſs enſued, which ended in a rupture.

Mr. Samuel Melliſh was then called, and was kept in the witneſs-box nearly two hours. He gave a circumſtantial account of all that had happened in the family with regard to this affair, from Auguſt 1800, till December 1801; of the various meetings he had with the plaintiff, and all the means they had uſed to counterwork his ſchemes. He proved the hand-writing of an immenſe number of Forſter's letters, which were read, and though they contained the paſſages cited, certainly did not of themſelves convey a contemptible idea, either of the writer's head or heart. Being ſhown the anonymous letter, he ſaid, he had examined it with great care, and that he had not the leaſt particle of doubt that it was the hand-writing of the plaintiff. Other witneſſes were afterward called, in corroboration of his evidence upon this point.

Several witneſſes were called and ſworn, who diſbelieved the letter to have been written by Mr. Forſter.

To diſprove their evidence, Mr. Erſkine examined Mr. Colebach, the inſpector of the franks at the Poſt-office, the duties of whoſe ſituation peculiarly enabled him to detect forgeries, and diſtinguiſh a diſguiſed from an ordinary flowing hand-writing. He ſaid, that in comparing the anonymous letter with the other letters proved to have been written by the plaintiff, he had no doubt but it had alſo been written by him: he pointed out a ſimilarity in a variety of letters.

Mr. Erſkine addreſſed the jury for the purpoſe of obſerving upon the evidence given by the plaintiff, to contradict the proof of the anonymous letter having been written by the plaintiff.

The attorney-general replied at great length, and defended the plaintiff from the aſperſions which had been caſt on his character—juſtified miſs Swain for her endeavours to promote the marriage of her ſchool-fellow with the object of her love—contended, that the plaintiff's ſtratagems to obtain interviews with the defendant were neither diſhonourable, or unuſual with regard to a lover who was denied acceſs to his miſtreſs by the vigilance of an old duenna—that the evidence of the plaintiff's having wrote the anonymous letter, was of too doubtful a nature to authorize a concluſion to his prejudice; in fact, that thoſe who were his intimate acquaintance were more likely to form an accurate judgment upon the ſubject than Mr. Melliſh, who was liſted as his foe, or the inſpector of franks, whoſe uſual obſervations were merely confined to the ſuperſcriptions of letters. He maintained, that the defendant having ſolemnly pledged herſelf to the marriage, was not juſtified from any treatment on the part of the plaintiff to violate her contract.

Mr. juſtice Le Blanc ſtated to the jury the nature of the action, obſerving, though it was one which was ſeldom brought by a man againſt a woman, was maintainable on the ground, that the party complaining was deprived by the conduct of the defendant of his proſpects of a future eſtabliſhment. The queſtion was, firſt, whether the plaintiff was in a ſituation to demand a compenſation; and, ſecondly, if he was, what ſhould be its amount. His lordſhip deſcribed the relative ſituation of the parties, and took a review of all the circumſtances of the caſe down to that of the anonymous letter. If the jury were of opinion that letter was wrote by the plaintiff, they would have nothing more to conſider, becauſe certainly a man who had had recourſe to ſuch an artifice, was not entitled to recover. If they were ſatisfied he had not written it, they would then determine what damages he had a right to receive from the party by whoſe caprice he had ſuſtained an injury.

The jury retired, and in about a quarter of an hour returned with a verdict for the plaintiff—damages 200l.

COURT OF EXCHEQUER, March 5.
Before the Lord Chief Baron and a Special Jury.
His majeſty's Attorney general, *v.* John Gregory.

THE counſel on the part of the crown ſtated to the court and jury, that this proſecution was commenced by order of his majeſty's commiſſioners of the ſtamp duties, to recover of the defendant penalties to the amount of 900l for a too common and injurious fraud upon the revenue, of

giving receipts upon unſtamped paper.—That the defendant was a potatoe merchant, reſiding in Criſpin-ſtreet, Spital-fields, where he carried on an extenſive trade. That he had conſiderable dealings with the witneſs whom he ſhould call to prove the caſe. That the information contained thirty-two counts for various offences, ſixteen of which were for giving receipts on payment of money upon unſtamped paper, whereby the defendant had forfeited for each offence the ſum of 10l, and the other ſixteen for penalties of 40l each, incurred by the defendant for a fraudulent contrivance to evade the uſe of ſtamps. That one mode, among others, adopted by the defendant in giving theſe receipts, was what is too commonly uſed by moſt tradeſmen at the foot of their ſhop bills for goods, namely, writing the word 'Caſh' oppoſite the ſum paid, and which the defendant had often done. But he had recourſe to another ingenious device, which he ſuppoſed would ſecure himſelf from any penalty, if his cuſtomers were ſatisfied to accept ſuch receipts, namely, by writing.—The day of the month and the year, on which the money was paid, and the letters A. B. C. at the foot of his bills of parcels, which he delivered to his cuſtomers as a diſcharge for the ſum paid.

Two witneſſes were called who proved the payment of the money to the defendant, and his hand writing to the ſeveral pieces of paper which he delivered as receipts, whereupon his counſel on his behalf ſaid the caſe was ſo fully made out, that he would not trouble his lordſhip and the gentlemen of the jury, and requeſted the counſel for the crown to accept a verdict for ſuch penalties as would be a leſſon to the defendant in future, and others guilty of ſimilar practices. It was therefore agreed, under the direction of the chief baron, to take a verdict for penalties to the amount of 160l, which his lordſhip ſaid he hoped would operate as a caution to others who were in the habit of defrauding the receipt duty, and he truſted they would not in future ſubject themſelves to ſuch heavy penalties for ſo trifling a ſum, and which moreover they had a right by law to charge to their cuſtomers.

COMMON HALL.

ON Thurſday, March 18, there was a very numerous meeting of the livery of London, aſſembled in common hall, at Guildhall, in order to take into conſideration the propriety of petitioning for the repeal of the Income tax.

The lord mayor, in a ſhort ſpeech, informed the livery of the reaſons which had induced him to convene the meeting, which he had done at the requiſition of thirty-one of their number. He expreſſed his readineſs at all times to obey the wiſhes of the livery.—The requiſition being read,

Mr. Travers came forward, and addreſſed his fellow-citizens. He ſaid, he ſhould have the honour of propoſing ſeveral reſolutions to them for their acceptance, which reſpected the purpoſe for which they were met, the repeal of the income tax: a tax which in its nature was both partial and oppreſſive, and went to ſtrike at the very exiſtence of the conſtitution. It had been ſaid that ſome modifications were to be adopted by the chancellor of the exchequer, to render it leſs odious; but he wiſhed them to remember, that however a pill might be gilded, it ſtill remained a pill. The tax went to eſtabliſh a ſort of inquiſition, in the manner of the Spaniſh inquiſition, and was repugnant to the true principles of religion, as it tended to make perſons, rather than expoſe their circumſtances, commit a crime which was offenſive in the eyes of God, that of perjury, which they were in ſome inſtances induced to, in order to avoid the deſtructive oppreſſion of the meaſure. He then moved the firſt reſolution.

Mr. Waithman ſeconded the motion. He condemned in the ſtrongeſt terms the tax, which he denominated one of the moſt diſgraceful that had ever been impoſed upon the people.

Mr. alderman Curtis defended himſelf from any blame which might attach to him for his conduct in giving the tax his ſupport. He conſidered that miniſters were then entitled to ſupport on account of the threatened invaſion from France, and as they were obliged to raiſe the means to carry on the war, he thought this manner the leaſt obnoxious of any that might be propoſed. At preſent he thought different, and conſidered the tax as oppreſſive.

Mr. alderman Anderſon expreſſed his happineſs in meeting the wiſhes of his conſtituents, and would give the petition all the aſſiſtance in his power.

Mr. alderman Coombe came forward

amid reiterated burſts of applauſe. He profeſſed himſelf to have been decidedly againſt the tax when it was firſt propoſed, and was ſtill in the ſame mind.

Mr. alderman Skinner condemned the tax, as the moſt partial and oppreſſive which had been ſuggeſted for many years: and expreſſed his determination to uſe every means in his power to procure a repeal.

The reſolutions were then ſeverally put and carried. The petition was read; after which, Mr. Perring, nephew to alderman Perring, came forward and propoſed an amendment to the petition. The ſubſtance of the amendment went to ſtate, that the tax was odious and oppreſſive, and not to be endured; but that the livery of London, confiding in the kindneſs of the houſe, truſted it would be repealed as ſoon as the definitive treaty ſhould be ſigned. The amendment was rejected by the meeting, and the petition ſubmitted by Mr. Travers, praying for an immediate repeal, was carried unanimouſly.

The thanks of the meeting were then voted to the lord mayor, who returned thanks in a neat ſpeech. The thanks of the meeting were alſo voted to Mr. Travers and Mr. Waithman, and the meeting broke up.

HISTORICAL CHRONICLE.

FEBRUARY 27.

HIS majeſty held a council at Buckingham houſe on Thurſday. The recorder attended with the report of the convicts under ſentence of death in January ſeſſion, when his majeſty was pleaſed to order their ſentence to be changed to that of tranſportation.

On Thurſday the ſeſſion ended at the Old Bailey, when ſentence of death was paſſed on W. Maſon, J. Jones, W. Bean, J. H. Caſhman, J. Parſey, F. Serdifield, S. Smith, T. Brown, W. Duggan, J. Condon, W. Ogle, A. Watſon, M. Denham, J. Huls, and W. Richardſon. Twenty-one were ordered to be tranſported for the term of ſeven years.—I. Davies and J. Jones were ordered to be tranſported for 14 years.—Eleven to be impriſoned in the houſe of correction at Clerkenwell. Eleven to be impriſoned in Newgate. Seven to be publicly whipped. Ten to be privately whipped; and three to pay a fine of 1s and be diſcharged.—The ſeſſions were adjourned until Wedneſday the 28th of April.

Letters from Dublin, of the 16th, give an account of the liberation of James Napper Tandy. He was brought from Lifford to Wicklow, circuitouſly, in a chaiſe and four, eſcorted by a guard of cavalry, avoiding all the large towns, the better to evade public notice. They travelled principally in the night. He arrived at Wicklow on the 15th, and was to embark next day, on board the Lovely Peggy, captain Harris, for Bourdeaux.

MARCH 4.

On Sunday morning, about ſix o'clock, died Mr. Joliffe, M. P. for Peterfield. His death was owing to an accident. Mr. Joliffe had been for a long time previouſly employed in inſpecting ſome improvements on his eſtate at Miſtham, in Surry. On Friday ſe'nnight he went into a field adjoining the houſe, where a number of labourers were employed in digging; while walking, not obſerving a pit near, he fell in, and unfortunately broke the ſpine of his back, and fractured his ſkull in ſeveral places. He lay a ſhort time in that ſituation; but aſſiſtance being near, he was conveyed to his houſe, where, after languiſhing in extreme torture until Sunday, he expired.

MARCH 5.

A reduction has taken place in the price of hackney coach fares. On Thurſday the 9th inſt. the additional ſixpence now allowed on every 1s on account of the price of oats, is to ceaſe.

The anniverſary of the Marine Society yeſterday was attended by upward of three hundred perſons. Several liberal donations to this moſt excellent and truly patriotic inſtitution were made on the occaſion, and in the whole near eight hundred pounds were collected.—Lord Romney preſided.

A melancholy accident happened laſt night in a ſtreet called Perkins' Rent, Weſtminſter. A large old houſe, inhabited by a number of poor families, ſuddenly fell in, about half paſt ten o'clock, with a horrible craſh, which, at that ſtill hour, was heard at a great diſtance.—The unfortunate beings who were thus buried alive, it appeared had retired to reſt, among whom were many children. The people that aſſembled, directed by their cries and groans, immediately ſet about removing the rubbiſh, and extricating the ſufferers, ſo that by daylight it was thought that all, or nearly ſo, were

dug out of the ruins: ſome miſerably wounded, and ſome dead. Among the dead is the wife of a ſoldier in the guards, lately returned from Egypt, of the name of Legget; he crept out of the ruins himſelf, and his wife was following him, when a beam ſhifted its poſition, fell acroſs her neck, and killed her. In the ſearch, her huſband was the firſt that diſcovered her. An old man and a child were alſo taken out dead. The wounded were carried to the Weſtminſter infirmary.

MARCH 9.

The lord chancellor has determined, on an application from the univerſity of Cambridge, that the London bookſellers were not juſtified in ſelling bibles printed in Scotland by the king's printer; but that the injunction did not prevent the bookſellers from exporting Scottiſh bibles to foreign countries, though it reſtrained the ſale of them in this country. They might alſo be brought to the port of London, for the purpoſe of exportation, but not landed.

MARCH 12.

At Hertford Aſſizes, the following curious particulars came out on the trial of the man convicted at the above aſſizes on Tueſday, of a mail robbery.—James Snook was indicted for feloniouſly aſſaulting on the king's highway John Stevens, the poſt-boy, who was employed to convey the letter-bags from Tring to Hemel Hempſtead, putting him in fear of his life, and taking from him the ſaid letter-bags. The darkneſs of the night prevented Stevens from having ſuch a view of the robber as to be able to identify the perſon of the priſoner; but the following chain of circumſtantial evidence was ſubmitted to the jury, to guide their determination as to the guilt of the priſoner.—Several witneſſes proved that he had been ſeen in the neighbourhood a few days before the robbery, riding upon an iron-grey horſe, and one of them met him cobbling the girth of the ſaddle which had been broke. The morning after the robbery, an iron-grey horſe, of the ſame deſcription, and a ſaddle, the girths of which had been broken, and unſkilfully cobbled, were found, with ſome of the letter-bags, in a field adjoining to the place where the robbery was committed. A conſiderable number of witneſſes were brought forward on the part of the proſecution, by whom ſeveral of the notes that were taken out of the letters in the bags were traced up to the priſoner, who ſent them into circulation the day after the robbery. The circumſtances of the priſoner being poſſeſſed of this property the day after the robbery, his being a man of no viſible means of livelihood, or poſſibility of coming honeſtly by thoſe notes; his having diſguiſed himſelf by aſſuming different names; having abſconded, and at the time of his arreſt having a brace of piſtols in his pocket; together with the general evidence of his having been ſeen in that neighbourhood a few days previous to the robbery, formed ſuch a maſs of circumſtantial evidence, that the jury, without heſitation, found him guilty.—He was ordered for execution.

MARCH 13.

On Wedneſday night the mortal remains of the late duke of Bedford were conveyed from Woburn Abbey, and depoſited on Thurſday afternoon in the family vault at Chenies. Agreeably to the earneſt requeſt of his grace, the funeral was to be conducted in the moſt ſimple manner poſſible. In obedience to this ſolemn injunction, the intimate and afflicted friends of the deceaſed declined attending the laſt ſad office, the awful ceremony of the interment of his remains. The corpſe left Woburn at ten o'clock on Wedneſday night, attended by three mourning coaches, in the firſt of which were Mr. Gotobed and Mr. Brown, his grace's ſolicitors; the two others contained the chief domeſtics of his grace. Next came the chariot of his grace, drawn by ſix bay horſes, with three footmen behind, followed by a groom leading his grace's favourite hackney. The Woburn tenantry cloſed the ſolemn proceſſion from the abbey. On its arrival at Rickmanſworth, about nine on Thurſday morning, it was joined by the Buckinghamſhire tenantry, and ſoon after by thoſe of Chenies, who were in waiting for its arrival, and the whole then proceeded to the place of interment. On its arrival at the churchyard gate, it was met by the rector of Chenies, the rev. Mr. Morris (who had accompanied the duke on his travels) and the rev. Dr. Randolph. A moſt excellent funeral oration was delivered on the occaſion by the former, who was ſo much affected throughout as to be ſcarcely audible. A becoming ſympathy imparted itſelf to every individual of the immenſe crowd, and the ſcene, was altogether of an awful and impreſſive deſcription. The body was placed in the family vault, upon the coffin of his grace's grandfather, near that of lady John Ruſſell, whoſe funeral the duke himſelf had in October laſt at-

tended, and immediately by the ſide of the late ducheſs. The coffin was covered with crimſon velvet, plainly ornamented, with the inſcription, 'The moſt Noble Francis, Duke of Bedford, born July 23, 1765, died March 2, 1802.' In town, the mournful paſſing knell was ſounded for ſeveral hours at the pariſh churches of St. George, Bloomſbury, and St. Paul, Covent-garden. Minute bells were tolled at each from eleven in the morning till two in the afternoon.

MARCH 15.

The late Mr. Thomas Robinſon, of Roeberton, near Taunton, has bequeathed the whole of his funded property to the ſtate. The following is an extract from his will:

'All my property in the Stocks I give to the aſſiſtance of government—it is my voluntary contribution to the defence of the nation; and I appoint the governor and caſhier of the Bank of England executors and truſtees; and I truſt they will have it placed to the proper account immediately after my death.

'All I have in Taunton, in money or goods of any kind, I give to my ſervant, Elizabeth Clerk, in requital for her taking care of me during two long illneſſes; the firſt of which was cauſed by poiſon given me by miſs Hannah Shute, which took out all my teeth, cauſed two or three impoſthumes, and from which I recovered by miracle, by a milk diet.'

MARCH 20.

At the laſt York aſſizes, a bill of indictment was preferred by Bacon Frank, eſq. a magiſtrate reſiding near Doncaſter, againſt Mr. Hewitt, a gentleman of large fortune; and colonel Sowerby, of the artillery, reſiding in Doncaſter; for a conſpiracy to make Mr. Frank's ſon elope and marry the daughter of the ſaid colonel Sowerby. The nature of the complaint made by Mr. Frank was, that his ſon, at the time of the marriage, wanted about half a year of being of age; that he was a young man of weak intellects, unequal to the regulation of his own conduct, and conſequently eaſily prevailed upon to follow any advice; that an eſtate of 4000l per annum, was entailed on his perſon, while the lady he had married was poſſeſſed of no property whatever. She was a fine, ſprightly, clever, beautiful girl, rather older than her huſband; and looking to her ſituation, the counſel ſaid he did not conſider it probable that ſhe could have married from affection, but that a ſplendid equipage and handſome ſtyle of living muſt have been her object. Previous to their running away, the lady's father had aſked the conſent of Mr. Frank, ſen. for his daughter to marry his ſon, which he peremptorily refuſed. The parties, in October 1800, ſet off from Mr. Hewitt's houſe for Gretna-Green, Mr. Hewitt accompanying them in the chaiſe, knowing that young Frank was not to be truſted. They went to Gretna-Green and were married; the father, colonel Sowerby, following, met the parties on their return to Carliſle. A number of witneſſes, chiefly poſt-boys, were called to prove the caſe, but nothing was made out to eſtabliſh a conſpiracy.—The counſel for the defendants ſaid he would prove it was a match of affection, ſolicited by Mr. Frank, jun. and refuſed by his father, though miſs Sowerby was a young lady in every reſpect ſuited to be his wife. He denied that Mr. Frank, jun. was a perſon of ſuch weak intellects as repreſented, and promiſed to prove him capable of acting for himſelf. Since he had been of age he had again married miſs Sowerby according to the forms of the church of England, and they lived a very happy couple.—Before any witneſſes were called for the defendants, Mr. Frank, ſen. at the ſuggeſtion of the court, thought it adviſeable to abandon the proſecution, and the defendants were of courſe acquitted, amid the lively joy of a moſt crowded court.

MARCH 23.

Letter of Sir Joſeph Banks to the Preſident and Secretaries of the French National Inſtitute.

Citizens,

Pleaſe to offer to the national inſtitute the expreſſion of my gratitude, for the honour which they have done me in beſtowing upon me the title of aſſociate of ſo diſtinguiſhed a learned body.

Aſſure my reſpectable brethren, that I conſider this mark of their eſteem as the firſt and moſt agreeable literary diſtinction that I could receive. To be the firſt choice of the fineſt literary ſociety in the world ſurpaſſes my moſt ambitious hopes; and I can never be too grateful to the ſociety which has conferred this honour upon me, or to the nation whoſe literary repreſentative it is; a nation which, amid the moſt terrible convulſion, of the moſt terrible revolution, has never ceaſed to have my eſteem, perſuaded as I was, even in the moſt diſaſtrous times, that the good citizens were conſiderable in number, that they would infallibly gain the aſcendancy, and reeſtabliſh the empire of virtue, of juſ-

tice, and honour, in the breaſts of their fellow countrymen.

Receive in particular all my thanks, citizens, for the truly obliging manner in which you communicated to me this good news. I am, with the ſincereſt eſteem for your diſtinguiſhed talents, &c.

JOSEPH BANKS.

MARCH 23.

On the evening, the aſſizes at Maidſtone terminated, ſeveral of the king's counſel and ſerjeants retired to dinner at the Star inn, and indulged themſelves in the pleaſures of the table till toward twelve o'clock at night. At this time, Mr. ſerjeant Beſt quitted the company in order to call upon his relation Mr. Knapp, to arrange their return to town in the morning. As he was walking down the ſtreet leading from the Star to Mr. Knapp's lodgings, he was paſſed by two men who appeared to regard him with particular circumſpection—they returned and paſſed him a ſecond time, and kept their eyes fixed on him till he reached Mr. Knapp's door. Mr. ſerjeant Beſt, on returning to the inn, perceived the ſame two men ſtanding oppoſite Mr. Knapp's door. He had not gone far, when they paſſed him a third time, and one of them accoſting him, aſked 'if he was Mr. ſerjeant Beſt?' Upon his replying in the affirmative, the man who had accoſted him, ſaid, 'then, ſir, you are a d—d impertinent ſcoundrel.' Mr. Beſt immediately did that which every gentleman would have done, he knocked him down, and not knowing what ſort of characters he might have to deal with, he endeavoured to reach his lodgings. They purſued him, and came up with him juſt as he had got to the door, when the ſame man who had uſed ſuch illiberal language, aſſaulted and ſtruck him ſeveral violent blows; a ſcuffle then enſued, and the ſerjeant's clerk having opened the door, the aggreſſor and his companion were forced into the houſe, when they turned out to be Mr. Samuel Ferrand Waddington, and his clerk. The latter addreſſing the ſerjeant ſaid, ſir, you will recollect I neither ſpoke to or ſtruck you. Immediately the ſerjeant's clerk obſerved, that the ſame perſon had in the courſe of the evening left a letter for him. The letter was brought and opened; it appeared to contain a printed addreſs from Mr. Waddington to the Hop-planters of Kent, ſetting forth the ſervices he had endeavoured to render them; the ſacrifices he had made of his fortune; the injury he had ſuſtained by the breach of their contracts with him, and the perſecutions he had undergone. On the back was written a note to ſerjeant Beſt, intimating 'that he was a ſcoundrel, for having (in the exerciſe of his profeſſional duty) applied the term fraudulent to thoſe contracts, and inferring that every man, who either publicly or privately ſtated them as ſuch, was a ſcoundrel; and adding, that he was to be found at a certain inn in the town till the next morning, when he ſhould ſet off for Dover, where he was alſo to be met with till a particular day.' Mr. Beſt obſerved that Mr. Waddington's conduct rendered it impoſſible to meet him as a man of honour. The parties then ſeparated, and the ſerjeant has ſubmitted the whole of the affair to the conſideration of Mr. Erſkine and another legal friend.

MARCH 30.

Yeſterday evening, when the committee appointed by the livery of London, for the Repeal of the Tax upon Income, were met, and proceeding to buſineſs, they received the following letter, addreſſed to Benjamin Travers, eſq. their chairman:

'Houſe of Commons,

'Sir, March 29.

'In order that the gentlemen of the committee may not be unneceſſarily engaged any longer in their object, I trouble you with this to give you the earlieſt intelligence that the chancellor of the exchequer has juſt given notice that he ſhall move the houſe of commons for a *Repeal of the Tax upon Income*.

'I have the honour to be, &c.

'Half paſt five. 'H. C. COMBE.'

LONDON GAZETTE EXTRAORDINARY.

Downing-ſtreet, March 29.

MR. Moore, aſſiſtant-ſecretary to marquis Cornwallis, arrived this morning at nine o'clock, with the DEFINITIVE TREATY OF PEACE, which was ſigned at Amiens, at four o'clock in the afternoon on the 27th inſtant, by the plenipotentiary of his majeſty, and by the plenipotentiaries of France, Spain, and the Batavian Republic.

[On the arrival of Mr. Moore, a letter was ſent to the lord-mayor by lord Hawkeſbury, which was literally the ſame as the Extraordinary Gazette.]

ALTERATIONS of SHERIFFS.

DEVONSHIRE—Sir John Davie, of Creed, bart.

Leiceſterſhire—John Pares, of Newarke, eſq.

Shropſhire—Thomas Harries, of Cruckton, eſq. in the room of William Ferriday, of Dawla-Parva, eſq.

Angleſey—Gwyllim Lloyd Wardle, of Ceſen Coch, eſq. in the room of William Bulkeley Hughes, of Brynddn, eſq.

Montgomeryſhire—Thomas Jones, of Llanlothian, eſq. in the room of Pryce Jones, of Cofronidd, eſq.

Carnarvonſhire—Robert Wynne, to be Robert William Wynne.

SHIPS captured from the ENEMY.

AMIABLE Maria, Spaniſh ſhip, of 14 guns, and the Limeno, of 18 guns, by the Chance.

BIRTHS.

LADY of the earl of Sefton, a daughter.

Lady of lord Holland, a ſon.

Lady of Henry Davidſon, eſq. of Bedford-ſquare, a ſon.

MARRIAGES.

HARRY Biſhopp, jun. eſq. of Storrington, Suſſex, to miſs Ann Badcock, of Baker-ſtreet, Portman-ſquare.

Earl of Charlemont, to miſs Bermingham.

Denny Aſhburnham, eſq. of Broomham, Suſſex, to Mrs. Bancroft.

William Davies, eſq. of the Strand, to miſs Lowrie, daughter of Robert Lowrie, eſq. of Lincoln.

Thomas Cadell, jun. of Upper Charlotte-ſtreet, Fitzroy-ſquare, ſon of alderman Cadell, to miſs Smith, daughter of Robert Smith, eſq. of Baſinghall-ſtreet.

Charles William Flint, eſq. to miſs Anna Maria Seton, youngeſt daughter of Daniel Seton, eſq. preſident of the council of Surat.

DEATHS.

DUKE of Bedford.

Alexander Geddes, L. L. D.

William Joliffe, eſq. M. P.

Iſaac Thompſon, eſq. of Hackney, aged 72.

Earl of Montrath, aged 77.

Viſcount Bateman, aged 80.

Launcelot Brown, eſq. of Buckden.

Rear-admiral James M'Namara.

Thomas Jees, eſq. chief teller of the bank of England.

Richard Gimbert, eſq. of Piccadilly.

Lady Muſgrave.

William Leſlie, eſq. at Wilcroft-houſe, Hereford.

John Parkinſon, eſq. of Lime-ſtreet-ſquare.

Miſs Wilkes, daughter of the late John Wilkes, eſq.

Mr. John Prigmore, of Witham, aged 96.

Dr. Murray, of Greville-ſtreet, Hatton-garden.

Mrs. Maty, relict of Dr. Maty, aged 85.

Colonel count Sutton Clanard.

Mrs. Mary Niſbet, of Edinburgh, aged 80.

Mrs. Margaret Dundas, daughter of the late right hon. Robert Dundas, of Arniſton.

James Hamilton, eſq. only ſon of colonel Hamilton.

John Coe Pigott, eſq. of Malden, Eſſex.

Dowager lady Lade.

Earl Fauconberg.

Felix Calvert, eſq.

PROMOTIONS.

RIGHT hon. Aſheton baron Curzon—to be a viſcount, by the title of viſcount Curzon, Penn, in Buckinghamſhire.

Right hon. George lord Rivers—to be baron Rivers, of Sudeley-caſtle, in Glouceſterſhire.

BANKRUPTS. From the GAZETTE, FEBRUARY 23.

R. GUYER, Gracechurch-ſtreet, hatter.

J. Nowlan, Newcaſtle-upon-Tyne, ſoap-maker.

J. Wainwright, Liverpool, gun maker.

R. Bleaſe, Liverpool, grocer.

T. Johnſon, Ouze Fleet, in Yorkſhire, dealer.

W. Collier, Leigh, Lancaſhire, corn-dealer.

J. Simpſon, Colcheſter, brazier.

S. J. Clegg, and J. Whitby, Liverpool, merchants.

J. Emett, Stoneyhurſt, in Lancaſhire, cotton-ſpinner.

P. Allen, Nantwich, in Cheſhire, innholder.

W. Williams, Cowbridge, Glamorganſhire, ſhopkeeper.

J. Wallis the younger, Briſtol, biſcuit-baker.

G. Gill, Warrington, Lancaſhire, merchant.

E. Twanley, Swanſea, in Glamorganſhire, baker.

FEBRUARY 27.

M. C. Horſley, Bread-ſtreet, merchant.

W. Butler, Weldon, Northamptonſhire, linen-draper.

E. Bower, New Mills, Derby, cotton-ſpinner.

R. Foggan, Salford, Lancaſter, cotton-manufacturer.

J. Yendole, Weſt Monckton, Somerſetſhire, mealman.

T. Young, Ripon, Yorkſhire, grocer.

H. Williams, Crickhowell, Brecon, money-ſcrivener.

H. Hope, Liverpool, woollen-draper.

W. Wrigg, Manchester, liquor-merchant.

MARCH 2.

L. Graham, W. Graham, and T. Graham, Liverpool, merchants.

C. Webb, Bromſgrove, Worceſterſhire, money-ſcrivener.

H. Pedlar, Bath, linen-draper.

J. Kingſton, Duke ſtreet, Mancheſter-ſquare, ſurgeon.

J. Green, Cumberland-ſtreet, Curtain-road, butcher.

G. Platt, Weakey, Yorkſhire, clothier.

T. Like, Old Brompton, builder.

R. Bottle, Great Warner-ſtreet, Cold-bath-fields.

R. Milne, Rochdale, in Lancaſhire, ſcrivener.

MARCH 6.

J. Anderſon, Church-ſtreet, Borough, twine-ſpinner.

J. Cobb, Wiſbeach, Cambridge, millwright.

W. Maſkery, Lane-end, Staffordſhire, mercer.

R. Donaldſon, Liverpool, haberdaſher.

S. Bickerton, Great Yarmouth, hoſier.

T. Williamſon, Holbeach, in Lincolnſhire, grocer.

W. Palmer, Holbeach, Lincolnſhire, draper.

A. Webſter, Belper, Derbyſhire, baker.

G. Pierſon, Cockermouth, Cumberland, woollen manufacturer.

J. Dyer, Wotton-under-Edge, Glouceſterſhire, ſpinning-machine-maker.

J. Kindon, Briſtol, cabinet-maker.

MARCH 9.

I. Woodall, Picket-row, Cumberland, hatter.

A. Stuart, Liverpool, merchant.

W. Morris, Liverpool, grocer.

R. Rippon, Liverpool, merchant.

J. Lewis, Lower Burgh, in Lancaſhire, cotton-ſpinner.

G. M'Kennan, Liverpool, ironmonger.

C. Stockwell, Shelf, Halifax, ſcribbling-miller; C. Hemingway, Leeds, preſſer; J. Haigh, Shelf, farmer; S. Stockwell, Halifax, yeoman; J. Baker and J. Rogerſon, Leeds, Yorkſhire, dyers.

J. Weſtby, Hatfield, Falmouth, warehouſeman.

E. Coombs, St. James'-ſtreet, Weſtminſter, ſtationer.

J. Hobart, Warwick ſtreet, Golden-ſquare, muſical-inſtrument-maker.

MARCH 13.

R. Swainſon, and J. Gardner, Liverpool, grocers.

T. Strickland, S. C. Holland, Liverpool, merchants.

H. Frazer, Nightingale-lane, grocer.

S. Woodbridge, New Brentford, ſtationer.

T. Bates, Welbeck-ſtreet, Cavendiſh-ſquare, auctioneer.

MARCH 16.

P. Hunter, Durham, money-ſcrivener.

R. Maunder, Exeter, wine-merchant.

G. Williams, Tooley-ſtreet, Southwark, cheeſemonger.

J. Mills, Macclesfield, hat manufacturer.

J. Harris, Holywell-ſtreet, Strand, ſaleſman.

MARCH 20.

J. Clegg and J. Prince, Watling-ſtreet, warehouſemen.

J. Taylor, and J. Hudſon, Bordeſley, Birmingham, factors.

R. Wordon, Pincock mill, Lancaſhire, miller.

J. Johnſon, Mancheſter, merchant.

E. Ruſſel, Maidſtone, hop-merchant.

H. Collings, and R. I. Gifford, St. Philip and Jacob, Glouceſterſhire, ſkinners.

J. Marſh, Aylſham, Norfolk, merchant.

C. E. Scott, Upper Berkeley-ſtreet, Portman-ſquare, bookſeller.

J. Howett, St. Martin's-lane, carpenter.

J. F. Du Bois, and J. Du Bois, Alderman's-walk, London, merchant.

MARCH 23.

P. Pownoll, Piccadilly, banker.

L. Staveley, Halifax, merchant.

N. James, Liverpool, factor.

NEW PUBLICATIONS.

TRANSACTIONS of the Society of Arts, vol. 19, 10s 6d.

Morrice's Treatise on Brewing, 8vo, 10s 6d.

Richardson's New Vitruvius Britannicus, imperial folio, 5l 15s 6d, half bound.

Parent's Friend, or Extracts on Education, with Notes, &c. 2 vol. 8vo, 14s.

Ellis' Proceedings in Parliament, relative to Bills, 8vo, 9s.

Mawe's Mineralogy of Derbyshire, 8vo, 6s.

Historical Tales, curious and instructive, 12mo, 4s 6d.

Jones' Epistle to the Romans analyzed, 8vo, 5s.

Pallas' Travels in Russia, 1793-4, vol. 1, 4to, 3l 3s.

Warner's Tour through the Northern Countries, 2 vol. 8vo, 18s.

Lettsom's Hints to promote Beneficence, &c. 3 vol. 8vo, 1l 8s 6d.

Itard's Account of the Savage of Aveyron, 12mo, 4s.

Scott's Minstrelsy of the Scotish Border, 2 vol. 8vo, 18s.

Barrow's Essay on Education, 2 vol. 12mo, 8s.

Wicks' Accountant's Guide, 12mo, 2s, bound.

Wicks' Book-keeping Reformed, 2 vol. 4to, 8s.

Cameron's Review of the French Revolution, 8vo, 6s 6d.

Caines' Letters on the Cultivation of the Otaheite Cane, &c. 8vo, 6s.

Thomson's Sonnets, Odes, and Elegies, small 8vo, 5s.

Complaynt of Scotland, with a Glossary, &c. by Leyden, 4to, 2l 2s.

Science Revived, a Poem, 4to, 18s.

Galloway's Brief Commentaries on the Revelation, 8vo, 9s.

Dictionary of Natural History, 16mo, 8s.

Kendal's Pocket Encyclopedia, 6 vol. 18mo, 18s.

Sauer's Account of an Expedition to the Northern Parts of Russia, 4to, 2l 2s.

Thornton's Inquiry into the Paper Credit of Great Britain, 8vo, 7s.

Poems and Ballads, 12mo, 3s 6d.

Lindsay's Conversations on the Divine Government, 8vo, 4s.

Daubeny's Discourses on the Connection between the Old and New Testament, 8vo, 9s.

Massouf, or Philosophy of the Day, 12mo, 3s 6d.

Lascelles, 3 vol. 12mo, 13s 6d.

Splendid Misery, 3 vol. 12mo, 13s 6d.

Scenes in Wales, or Maid of Llangelf, 12mo, 4s.

AVERAGE PRICES of CORN.

March 20, 1802.

By the Winchester Quarter of 8 Bushels.

Inland Counties.

	Wheat.		Rye.		Barley.		Oats.	
	s.	d.	s.	d.	s.	d.	s.	d.
Middlesex	82	1	43	5	42	5	24	9
Surry	83	4	42	0	41	8	24	8
Hertford	76	2	46	6	40	0	23	4
Bedford	74	11	—	—	42	1	20	3
Huntingdon	76	2	—	—	38	8	17	8
Northampton	74	6	—	—	38	4	18	0
Rutland	76	0	—	—	39	0	17	0
Leicester	77	0	—	—	39	9	18	2
Nottingham	81	8	51	9	45	4	20	10
Derby	84	0	—	—	49	0	22	0
Stafford	81	4	—	—	43	10	22	5
Salop	77	0	58	4	43	10	22	11
Hereford	63	11	48	0	37	5	22	6
Worcester	74	3	46	2	41	11	28	3
Warwick	81	6	—	—	43	5	25	6
Wilts	64	0	—	—	33	8	21	10
Berks	80	10	—	—	38	3	25	1
Oxford	74	3	—	—	37	2	21	4
Bucks	79	4	—	—	41	0	22	2
Brecon	69	7	—	—	48	0	16	10
Montgomery	67	2	46	4	40	6	18	4
Radnor	67	4	—	—	35	7	20	6

Maritime Counties.

Essex	84	0	39	0	39	2	24	4
Kent	75	3	—	—	39	3	24	9
Suffex	75	0	—	—	38	10	25	8
Suffolk	70	9	34	0	40	2	20	7
Cambridge	69	11	42	0	37	11	15	8
Norfolk	75	3	42	6	38	1	20	1
Lincoln	72	11	48	4	36	7	16	7
York	70	10	46	10	37	5	17	6
Durham	73	7	—	—	40	0	19	0
Northumberland	65	9	48	0	31	7	18	2
Cumberland	85	1	51	7	38	5	21	7
Westmorland	83	3	57	0	41	4	22	9
Lancaster	80	8	—	—	46	10	24	1
Chester	74	1	—	—	—	—	22	4
Flint	None		bro't		forSale		—	—
Denbigh	82	0	—	—	50	4	20	3
Anglesea	—	—	—	—	32	0	—	—
Carnarvon	77	8	—	—	43	4	19	0
Merioneth	75	9	—	—	43	0	22	0
Cardigan	66	9	—	—	30	8	14	0
Pembroke	61	9	—	—	29	7	13	8
Carmarthen	64	8	—	—	35	2	15	0
Glamorgan	69	10	—	—	36	0	17	2
Gloucester	73	3	—	—	38	11	20	11
Somerset	65	7	—	—	37	1	16	0
Monmouth	68	1	—	—	39	1	18	0
Devon	66	8	—	—	31	9	16	5
Cornwall	63	7	—	—	29	2	16	2
Dorset	67	11	—	—	34	10	25	11
Hants	70	10	—	—	37	1	24	0

Average of England and Wales.

Per Quarter	74	0	46	6	38	3	20	6

March 25—Peck Loaf, 3s 11d.

METEOROLOGICAL JOURNAL, February 1802.

[For the Explanation, see Vol. 92, Page 111.]

D.	H.	Baro.	T.out	T.in.	H.	C.	Wind.	Weather, &c.	Rain 1,62
1	8	29,72	49	51	61	5	SSW 3	. little wet	
	2	29,75	49,5	51,5	59	5	SSW 3	. less wind	
2	8	29,79	42	51,5	56	2	W 1	foggy. fine	
N	2	29,92	47	51	53	3	SW 1	. little wet at times	
3	8	29,99	42	49,5	58	2	S 2	: cloudy	
	2	29,95	46,5	50,5	56	5	S 2	. rainy eve. fine	
4	8	29,90	41,5	48,5	54	3	S 3	. rain and more wind: fine	
	2	29,80	45,5	50	53	3	WSW 4	. showery. less wind. clear night	
5	8	29,10	36,5	46,5	53	2	W 1	little foggy	
	2	29,16	42	48,5	49	1	W 1	hazy. cloudy eve. much gentle rain	
6	8	30,42	44,5	47,5	62	h	WSW 1	. fine. cloudy: little rain	[wind
	2	30,48	47,5	49,5	57	5	NW 1	hazy. little wet at times. windy night: less	
7	8	30,02	37,5	46	55	3	N 1		
	2	30,12	41	47	53	3	N 1	. cloudy. fine. clear night	
8	8	30,28	33	42,5	53	f	NW 1	not cloudy. fine: thick upward	[fine
	2	30,10	41,5	46,5	53	h	SSW 2	. more wind and rainy. less wind at night:	
9	8	29,97	36,5	41,5	53	1	W 1	little foggy	
	2	29,96	42	46,5	51	3	W 2	hazy. clear	
10	8	29,71	35	45,5	53	1	WSW 1		
	2	29,69	41	46	49	3	W 1	hazy: cloudy. little sleet	
11	8	29,69	35,5	45,5	53	h	W 1	chiefly sleet	
	2	29,79	38	45,5	57	h	NNE 1	. little sleet and rain. cloudless eve	
12	8	30,09	34	44	58	3	N 2	little foggy	
	2	30,18	39,5	48,5	53	3	N 2	hazy	
13	8	30,29	33	43,5	55	2	N 1	hazy	
	2	30,27	38,5	43	53	4	N 1	hazy. little snow. fine eve	
14	8	30,27	33,5	41,5	52	4	NNE 1	hazy	
	2	30,24	37	42	50	4	NNE 1	hazy. more cloudy	
15	8	30,05	32	42	50	5	N 1	hazy. little snow at times	
	2	30,00	35	42,5	48	5	WNW 1	little snow. fine night: cloudy. snow	
16	8	29,80	32	42	55	f	W 0	. little rain. fine: cloudy	
	2	29,74	36,5	43	54	4	W 1	hazy. little rain. fine night	
17	8	29,52	37,5	43,5	59	f	WSW 0	. cloudy. drizzly at times	
F	2	29,39	44,5	46	62	5	S 1	. drizzly at times	
18	8	29,36	40	46,5	62	f	S 0	. fine. cloudy	
	2	29,49	43	46,5	58	h	ESE 1	. cloudy	
19	8	29,79	39	46	60	f	SE 0	. little wind and cloudy	
	2	29,70	44,5	47	57	5	S 2	. much gentle rain. fine night	
20	8	29,52	42	47,5	60	2	SW 1	. rain. fine	
	2	29,65	46	49,5	58	3	W 1	. cloudy: rain	
21	8	29,66	47,5	49,5	65	h	WSW 1		
	2	29,72	52	52	62	h	W 1	. gentle rain. fair night	
22	8	29,76	55	52,5	65	5	WSW 1	hazy. little rain	
	2	29,91	55	55,5	63	5	WSW 2	. gentle rain at times	
23	8	30,16	50,5	55	63	f	W 1	drizzly. little rain	
	2	30,15	55	56	64	5	W 1	. little rain: fine	
24	8	30,19	44	54,5	58	2	W 1	low fog. cloudy	
	2	30,03	52	55	62	5	WSW 2	. little rain. fine night: clear. little rain	
25	8	29,69	41,5	52	62	h	N 2	little rain. more wind: fine	
	2	30,03	45	52,5	56	3	NNE 3	. cloudy. little rain. fine night	
26	8	30,29	36,5	47	59	2	N 1	little foggy. thick upward	
	2	30,30	43	47,5	54	h	N 1	not cloudy. fine night	
27	8	30,21	37,5	46,5	57	1	S 1		
	2	30,15	47,5	49	56	3	WSW 2	. calm night and thick upward	
28	8	30,04	42,5	47	58	h	WSW 0		
	2	29,96	46,5	48	56	5	WSW 1	hazy	

PRICES of STOCKS, from FEBRUARY 26, to MARCH 27, 1802, both inclusive.

By ANTHONY CLARKE, Stockbroker, No. 29, Princes-Street, Lothbury.

Days	Bank Stock.	3 per C. reduced.	3 per C. consols.	4 per C. Anns.	Old 5 per C. Conf.	New 5 per C. Anns.	Long Anns.	Short Anns.	India Stock.	Imperial 3 per C.	Imperial Ann.	Exchequer Bills.	English Lot. Tic.	Irish Lot. Tic.
26	191 ¼	69 ⅝	68⅞ 69½	86 ⅜	100	101 ⅝	20 ⅜	5 ⅜	214 ¼	68 ⅛		4p. pr.		
27		69 ⅝	69⅛ 69½	86 ⅜	100 ⅛	101 ⅝	20 ⅜	5 ⅜	214 ¾	68 ⅛		4		
1	190	69 ⅝	69⅛ 68¾	86 ⅜	100 ⅛	101 ⅝	20 ⅜			68 ⅛	12 ⅜	5		
2	190 ¼	69 ⅝	68¾ ⅞	85 ¾	99 ⅞	101 ⅝		5 ⅜	214	67 ⅞	12 ⅜	4		
3														
4		69 ⅝	69⅛ 69½	86 ⅜	100 ⅛	101 ⅝	20 ⅜	5 ⅜	214	68 ⅛		4		
5	190	shut.	69⅛ 68¾	86 ⅜	100 ⅛	101 ⅝	20 ⅜			68 ⅛	12 ⅜	8		
6	shut.		67½ 68	shut.	99 ⅞	101 ½	shut.	shut.		67 ⅛	12 ⅛	7		
8	189		67½ 68		99 ⅞	shut.			213 ½	67 ⅛	12 ⅛	4		
9			67½ 68		99 ⅞				214	67 ⅛	12 ⅛	4		
10	188		67½ 67⅞		99 ⅞				214	67 ⅛	12 ⅛	4		
11			67⅝ 67½		100				213	67 ⅛	12 ⅛	2		
12			67⅝ 67½		100					67 ⅛	12 ⅛	2		
13			67⅝ 68¼		100 ⅛					67 ⅛	12 ⅛	2		
15			68⅛ 68		100 ⅛				213 ½	68 ⅛	12 ⅜	2		
16	189 ½		68⅞ 68⅛		101 ⅛				213 ½	68 ⅛		2		
17	189 ½		69⅛ 68¾		101 ⅛					68 ⅛	12 ⅜	3		
18	189 ½		69⅛ 69		101 ⅛				213 ½			3		
19	189 ¾		69⅛ 69¼		101 ⅛					68 ⅛	12 ⅜	1		
20			69⅛ 69⅛		101 ⅛					68	12			
22			68⅞ 69¼		102						12	2		
23			68⅞ 69⅜		102						12	2		
24	189 ¼		69⅛ 68⅞		102 ⅛					68 ½	12 ½			
25			69⅛ 69¾									1		
26			69⅜ 69½		102 ¾					68 ¾	12 ½	1		
27			69⅛ 69¾		102 ¾						12 ½			

☞ In the 3 per Cent. consols. the highest and lowest Price of each Day is given; in every other Article the highest Price only, the Long, Short, and Imperial Annuities excepted, which are given within a sixteenth of the highest Price. In the different Funds that are shut, the Prices are given with the Dividend till the Days of Opening.

☞ In the 3 per Cent. confols. the higheſt and loweſt Price of each Day is given; in every other Article the higheſt Price only, the Long, Short, and Imperial Annuities excepted, which are given within a ſixteenth of the higheſt Price. In the different Funds that are ſhut, the Prices are given with the Dividend till the Days of Opening.